



6560-50-P

## **ENVIRONMENTAL PROTECTION AGENCY**

### **40 CFR Parts 52 and 81**

**[EPA-R04-OAR-2014-0904; FRL-9925-14-Region 4]**

#### **Approval of Implementation Plans and Designation of Areas; Tennessee; Redesignation of the Tennessee Portion of the Chattanooga, 1997 PM<sub>2.5</sub> Nonattainment Area to Attainment**

**AGENCY:** Environmental Protection Agency.

**ACTION:** Proposed rule.

**SUMMARY:** On November 13, 2014, the State of Tennessee, through the Tennessee Department of Environment and Conservation (TDEC), submitted a request to redesignate the Tennessee portion of the Chattanooga, TN-GA-AL fine particulate matter (PM<sub>2.5</sub>) nonattainment area (hereafter referred to as the “Chattanooga TN-GA-AL Area” or “Area”) to attainment for the 1997 Annual PM<sub>2.5</sub> national ambient air quality standards (NAAQS) and to approve a state implementation plan (SIP) revision containing a maintenance plan for the Tennessee portion of the Chattanooga TN-GA-AL Area. The Tennessee portion of the Chattanooga TN-GA-AL Area is comprised of Hamilton County in Tennessee. The Environmental Protection Agency (EPA) is proposing to approve the redesignation request and the related SIP revision, including TDEC’s plan for maintaining attainment of the PM<sub>2.5</sub> standard, for the Tennessee portion of the Chattanooga TN-GA-AL Area. EPA is also proposing to approve into the Tennessee SIP the motor vehicle emission budgets (MVEBs) for nitrogen oxides (NO<sub>x</sub>) and PM<sub>2.5</sub> for the year 2025 for the Tennessee portion of the Chattanooga TN-GA-AL Area. In separate actions, EPA

approved the redesignation requests and associated maintenance plans for the Alabama and Georgia portions of this Area.

**DATES:** Comments must be received on or before [insert date 30 days after date of publication in the Federal Register].

**ADDRESSES:** Submit your comments, identified by Docket ID No. EPA-R04-OAR-2014-0904, by one of the following methods:

1. [www.regulations.gov](http://www.regulations.gov): Follow the on-line instructions for submitting comments.
2. E-mail: [R4-ARMS@epa.gov](mailto:R4-ARMS@epa.gov).
3. Fax: (404) 562-9019.
4. Mail: EPA-R04-OAR- 2014-0904, Air Regulatory Management Section (formerly the Regulatory Development Section), Air Planning and Implementation Branch (formerly the Air Planning Branch), Air, Pesticides and Toxics Management Division, U.S. Environmental Protection Agency, Region 4, 61 Forsyth Street, SW, Atlanta, Georgia 30303-8960.
5. Hand Delivery or Courier: Ms. Lynorae Benjamin, Chief, Air Regulatory Management Section, Air Planning and Implementation Branch, Air, Pesticides and Toxics Management Division, U.S. Environmental Protection Agency, Region 4, 61 Forsyth Street, SW, Atlanta, Georgia 30303-8960. Such deliveries are only accepted during the Regional Office's normal hours of operation. The Regional Office's official hours of business are Monday through Friday, 8:30 a.m. to 4:30 p.m., excluding Federal holidays.

*Instructions:* Direct your comments to Docket ID No. EPA-R04-OAR-2014-0904. EPA policy is that all comments received will be included in the public docket without change and may be

made available online at [www.regulations.gov](http://www.regulations.gov), including any personal information provided, unless the comment includes information claimed to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Do not submit through [www.regulations.gov](http://www.regulations.gov) or e-mail, information that you consider to be CBI or otherwise protected. The [www.regulations.gov](http://www.regulations.gov) website is an “anonymous access” system, which means EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send an e-mail comment directly to EPA without going through [www.regulations.gov](http://www.regulations.gov), your e-mail address will be automatically captured and included as part of the comment that is placed in the public docket and made available on the Internet. If you submit an electronic comment, EPA recommends that you include your name and other contact information in the body of your comment and with any disk or CD-ROM you submit. If EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, EPA may not be able to consider your comment. Electronic files should avoid the use of special characters, any form of encryption, and be free of any defects or viruses. For additional information about EPA’s public docket visit the EPA Docket Center homepage at <http://www.epa.gov/epahome/dockets.htm>.

*Docket:* All documents in the electronic docket are listed in the [www.regulations.gov](http://www.regulations.gov) index. Although listed in the index, some information is not publicly available, i.e., CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically in [www.regulations.gov](http://www.regulations.gov) or in hard copy at the Air Regulatory Management Section, Air Planning and Implementation Branch, Air, Pesticides and Toxics Management Division, U.S. Environmental Protection

Agency, Region 4, 61 Forsyth Street, SW, Atlanta, Georgia 30303-8960. EPA requests that if at all possible, you contact the person listed in the **FOR FURTHER INFORMATION CONTACT** section to schedule your inspection. The Regional Office's official hours of business are Monday through Friday, 8:30 a.m. to 4:30 p.m., excluding Federal holidays.

**FOR FURTHER INFORMATION CONTACT:** Joydeb Majumder of the Air Regulatory Management Section, in the Air Planning and Implementation Branch, Air, Pesticides and Toxics Management Division, U.S. Environmental Protection Agency, Region 4, 61 Forsyth Street, SW, Atlanta, Georgia 30303-8960. Joydeb Majumder may be reached by phone at (404) 562-9121, or via electronic mail at [majumder.joydeb@epa.gov](mailto:majumder.joydeb@epa.gov).

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**I. What are the Actions EPA is Proposing to Take?**

In this action, EPA is proposing to make a determination that the Chattanooga TN-GA-AL Area is continuing to attain the 1997 Annual PM<sub>2.5</sub> NAAQS<sup>1</sup> and to take additional actions related to Tennessee’s request to redesignate the Tennessee portion of the Chattanooga TN-GA-AL Area, which is summarized as follows and described in greater detail throughout this notice of proposed rulemaking. EPA proposes: (1) to redesignate the Tennessee portion of the Chattanooga TN-GA-AL Area to attainment for the 1997 Annual PM<sub>2.5</sub> NAAQS; and (2) to approve, under section 175A of the Clean Air Act (CAA or Act), Tennessee’s 1997 Annual PM<sub>2.5</sub> NAAQS maintenance plan, including the associated MVEBs, for the Tennessee portion of the Chattanooga TN-GA-AL Area into the Tennessee SIP.

First, EPA proposes to determine that the Tennessee portion of the Chattanooga TN-GA-AL Area has met the requirements for redesignation under section 107(d)(3)(E) of the CAA. In this action, EPA is proposing to approve a request to change the legal designation of Hamilton

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<sup>1</sup> On September 8, 2011, at 76 FR 55774, EPA determined that the Chattanooga TN-GA-AL Area attained the 1997 PM<sub>2.5</sub> NAAQS by its applicable attainment date of April 5, 2010, and that the Area was continuing to attain the PM<sub>2.5</sub> standard with monitoring data that was currently available.

County in Tennessee, located within the Chattanooga TN-GA-AL Area, from nonattainment to attainment for the 1997 Annual PM<sub>2.5</sub> NAAQS.

Second, EPA is proposing to approve Tennessee's 1997 Annual PM<sub>2.5</sub> NAAQS maintenance plan for the Tennessee portion of the Chattanooga TN-GA-AL Area (such approval being one of the CAA criteria for redesignation to attainment status). The maintenance plan is designed to help keep the Chattanooga TN-GA-AL Area in attainment for the 1997 Annual PM<sub>2.5</sub> NAAQS through 2025. The maintenance plan that EPA is proposing to approve today includes on-road MVEBs for direct PM<sub>2.5</sub> and NO<sub>x</sub> for the Tennessee portion of the Chattanooga TN-GA-AL Area for transportation conformity purposes. EPA is proposing to approve the 2025 MVEBs into the Tennessee SIP that are included as part of Tennessee's maintenance plan for the 1997 Annual PM<sub>2.5</sub> NAAQS.

Further, EPA proposes to make the determination that the Chattanooga TN-GA-AL Area is continuing to attain the 1997 Annual PM<sub>2.5</sub> NAAQS and that all other redesignation criteria have been met for the Tennessee portion of the Chattanooga TN-GA-AL Area. The bases for EPA's determination for the Area are discussed in greater detail below. EPA is also providing the public an update of the status of EPA's adequacy process for the 2025 MVEBs for PM<sub>2.5</sub> and NO<sub>x</sub> for the Tennessee portion of the Chattanooga TN-GA-AL Area. Please see Section VIII of this proposed rulemaking for further explanation of this process and for more details.

Today's notice of proposed rulemaking is in response to Tennessee's November 13, 2014, SIP revision, which requests redesignation of the Tennessee portion of the Chattanooga TN-GA-AL Area to attainment for the 1997 Annual PM<sub>2.5</sub> NAAQS and addresses the specific issues summarized above and the necessary elements for redesignation described in section 107(d)(3)(E) of the CAA. In separate actions, EPA approved the redesignation requests and

associated maintenance plans for the Alabama and Georgia portions of the Area. *See* 79 FR 76235 (December 22, 2014) and 79 FR 75748 (December 19, 2014), respectively.

## **II. What is the Background for EPA's Proposed Actions?**

Fine particle pollution can be emitted directly or formed secondarily in the atmosphere. The main precursors of secondary PM<sub>2.5</sub> are sulfur dioxide (SO<sub>2</sub>), NO<sub>x</sub>, ammonia, and volatile organic compounds (VOC). *See* 72 FR 20586, 20589 (April 25, 2007). Sulfates are a type of secondary particle formed from SO<sub>2</sub> emissions of power plants and industrial facilities. Nitrates, another common type of secondary particle, are formed from NO<sub>x</sub> emissions of power plants, automobiles, and other combustion sources.

On July 18, 1997, EPA promulgated the first air quality standards for PM<sub>2.5</sub>. EPA promulgated an annual standard at a level of 15 micrograms per cubic meter (µg/m<sup>3</sup>), based on a 3-year average of annualmean PM<sub>2.5</sub> concentrations. In the same rulemaking, EPA promulgated a 24-hour standard of 65 µg/m<sup>3</sup>, based on a 3-year average of the 98<sup>th</sup> percentile of 24-hour concentrations. On October 17, 2006, EPA retained the annual average NAAQS at 15 µg/m<sup>3</sup> but revised the 24-hour NAAQS to 35 µg/m<sup>3</sup>, based again on the 3-year average of the 98<sup>th</sup> percentile of 24-hour concentrations.<sup>2</sup> *See* 71 FR 61144. Under EPA regulations at 40 CFR part 50, the primary and secondary 1997 Annual PM<sub>2.5</sub> NAAQS are attained when the annual arithmetic mean concentration, as determined in accordance with 40 CFR part 50, appendix N, is less than or equal to 15.0 µg/m<sup>3</sup> at all relevant monitoring sites in the subject area over a 3-year period.

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<sup>2</sup> In response to legal challenges of the annual standard promulgated in 2006, the United States Court of Appeals for the District of Columbia Circuit (D.C. Cir.) remanded that NAAQS to EPA for further consideration. *See American Farm Bureau Federation and National Pork Producers Council, et al. v. EPA*, 559 F.3d 512 (D.C. Cir. 2009). However, given that the 1997 and 2006 Annual NAAQS are essentially identical, attainment of the 1997 Annual NAAQS would also indicate attainment of the remanded 2006 Annual NAAQS.

On January 5, 2005, and supplemented on April 14, 2005, EPA designated Hamilton County in Tennessee, in association with counties in Alabama and Georgia in the Chattanooga TN-GA-AL Area, as nonattainment for the 1997 PM<sub>2.5</sub> NAAQS. *See* 70 FR 944 and 70 FR 19844, respectively. On November 13, 2009, EPA promulgated designations for the 24-hour standard established in 2006, designating counties in the Chattanooga TN-GA-AL Area as unclassifiable/attainment for the 2006 24-hour PM<sub>2.5</sub> NAAQS. *See* 74 FR 58688. That action also clarified that Hamilton County in the Chattanooga TN-GA-AL Area was classified unclassifiable/attainment for the 1997 24-hour PM<sub>2.5</sub> NAAQS. EPA did not promulgate designations for the 2006 annual PM<sub>2.5</sub> NAAQS because that NAAQS was essentially identical to the 1997 Annual PM<sub>2.5</sub> NAAQS. Therefore, Hamilton County in the Chattanooga TN-GA-AL Area is designated nonattainment for the Annual PM<sub>2.5</sub> NAAQS promulgated in 1997, and today's action only addresses this designation.

All 1997 PM<sub>2.5</sub> NAAQS areas were designated under subpart 1 of title I, part D, of the CAA. Subpart 1 contains the general requirements for nonattainment areas for any pollutant governed by a NAAQS and is less prescriptive than the other subparts of title I, part D. On April 25, 2007, EPA promulgated its PM<sub>2.5</sub> Implementation Rule, codified at 40 CFR part 51, subpart Z, in which the Agency provided guidance for state and tribal plans to implement the 1997 PM<sub>2.5</sub> NAAQS. *See* 72 FR 20664. This rule, at 40 CFR 51.1004(c), specifies some of the regulatory results of attaining the NAAQS, as discussed below. The United States Court of Appeals for the District of Columbia Circuit (D.C. Circuit) remanded the Clean Air Fine Particle Implementation Rule and the final rule entitled "Implementation of the New Source Review (NSR) Program for Particulate Matter Less than 2.5 Micrometers (PM<sub>2.5</sub>)" final rule (73 FR 28321, May 16, 2008) (collectively, "1997 PM<sub>2.5</sub> Implementation Rule") to EPA on January 4, 2013, in *Natural*



*Resources Defense Council v. EPA*, 706 F.3d 428 (D.C. Cir. 2013). The court found that EPA erred in implementing the 1997 PM<sub>2.5</sub> NAAQS pursuant to the general implementation provisions of subpart 1 of Part D of Title I of the CAA, rather than the particulate matter-specific provisions of subpart 4 of part D of title I. The effect of the court's ruling on this proposed redesignation action is discussed in detail in Section VI of this document.

The 3-year ambient air quality data for 2007-2009 indicated no violations of the 1997 PM<sub>2.5</sub> NAAQS for the Chattanooga TN-GA-AL Area. As a result, on November 13, 2014, Tennessee requested redesignation of the Tennessee portion of the Chattanooga TN-GA-AL Area to attainment for the 1997 Annual PM<sub>2.5</sub> NAAQS. The redesignation request includes three years of complete, quality-assured ambient air quality data for the 1997 Annual PM<sub>2.5</sub> NAAQS for 2007-2009, indicating that the 1997 PM<sub>2.5</sub> NAAQS had been achieved for the Chattanooga TN-GA-AL Area. Under the CAA, nonattainment areas may be redesignated to attainment if sufficient, complete, quality-assured data is available for the Administrator to determine that the area has attained the standard and the area meets the other CAA redesignation requirements in section 107(d)(3)(E). The Chattanooga TN-GA-AL Area's design value, based on data from 2007 through 2009, is below 15.0 µg/m<sup>3</sup>, which demonstrates attainment of the standard. While Annual PM<sub>2.5</sub> concentrations are dependent on a variety of conditions, the overall improvement in annual PM<sub>2.5</sub> concentrations in the Tennessee portion of the Chattanooga TN-GA-AL Area can be attributed to the reduction of pollutant emissions, as discussed in more detail in Section V of this proposed rulemaking.

The D.C. Circuit and the United States Supreme Court have issued a number of decisions and orders regarding the status of EPA's regional trading programs for transported air pollution, CAIR and CSAPR, that impact this proposed redesignation action. The effect of those court

actions on this rulemaking is discussed in detail in Section V of this document.

### **III. What are the Criteria for Redesignation?**

The CAA provides the requirements for redesignating a nonattainment area to attainment. Specifically, section 107(d)(3)(E) of the CAA allows for redesignation provided the following criteria are met: (1) the Administrator determines that the area has attained the applicable NAAQS; (2) the Administrator has fully approved the applicable implementation plan for the area under section 110(k); (3) the Administrator determines that the improvement in air quality is due to permanent and enforceable reductions in emissions resulting from implementation of the applicable SIP and applicable Federal air pollutant control regulations and other permanent and enforceable reductions; (4) the Administrator has fully approved a maintenance plan for the area as meeting the requirements of section 175A; and (5) the state containing such area has met all requirements applicable to the area under section 110 and part D of title I of the CAA.

EPA has provided guidance on redesignation in the General Preamble for the Implementation of title I of the CAA Amendments of 1990 (April 16, 1992 (57 FR 13498), and supplemented on April 28, 1992 (57 FR 18070)) and has provided further guidance on processing redesignation requests in the following documents:

1. “Procedures for Processing Requests to Redesignate Areas to Attainment,”  
Memorandum from John Calcagni, Director, Air Quality Management Division,  
September 4, 1992 (hereafter referred to as the “Calcagni Memorandum”);

2. “State Implementation Plan (SIP) Actions Submitted in Response to Clean Air Act (CAA) Deadlines,” Memorandum from John Calcagni, Director, Air Quality Management Division, October 28, 1992; and
3. “Part D New Source Review (Part D NSR) Requirements for Areas Requesting Redesignation to Attainment,” Memorandum from Mary D. Nichols, Assistant Administrator for Air and Radiation, October 14, 1994.

#### **IV. Why is EPA Proposing These Actions?**

On November 13, 2014, TDEC requested the redesignation of the Tennessee portion of the Chattanooga TN-GA-AL Area to attainment for the 1997 Annual PM<sub>2.5</sub> NAAQS. The Chattanooga TN-GA Area has attained the 1997 Annual PM<sub>2.5</sub> NAAQS, and EPA’s preliminary evaluation indicates that the Tennessee portion of this Area has met the requirements for redesignation set forth in section 107(d)(3)(E), including the maintenance plan requirements under section 175A of the CAA. EPA is also announcing the status of its adequacy determination for both the NO<sub>x</sub> and direct PM<sub>2.5</sub> MVEBs for the Tennessee portion of the Chattanooga TN-GA-AL Area. Additionally, EPA is also proposing to approve the MVEBs for both NO<sub>x</sub> and direct PM<sub>2.5</sub> that were included in Tennessee’s maintenance plan.

#### **V. What is EPA’s Analysis of the Request?**

As stated above, in accordance with the CAA, EPA proposes in today’s action to: (1) redesignate the Tennessee portion of the Chattanooga TN-GA-AL Area to attainment for the 1997 Annual PM<sub>2.5</sub> NAAQS; and (2) approve into the Tennessee SIP the 1997 Annual PM<sub>2.5</sub> NAAQS maintenance plan, including the associated MVEBs, for the Tennessee portion of the

Chattanooga TN-GA-AL Area. Further, EPA proposes to make the determination that the Chattanooga TN-GA-AL Area continues to attain the 1997 Annual PM<sub>2.5</sub> NAAQS and that all other redesignation criteria have been met for the Tennessee portion of the Chattanooga TN-GA-AL Area. The five redesignation criteria provided under CAA section 107(d)(3)(E) are discussed in greater detail for the Area in the following paragraphs of this section.

**Criteria (1) - *The Chattanooga TN-GA-AL Area has attained the 1997 Annual PM<sub>2.5</sub> NAAQS.***

For redesignating a nonattainment area to attainment, the CAA requires EPA to determine that the area has attained the applicable NAAQS (CAA section 107(d)(3)(E)(i)). EPA is proposing to determine that the Chattanooga TN-GA-AL Area continues to attain the 1997 Annual PM<sub>2.5</sub> NAAQS since the May 31, 2011, attainment determination. *See* 76 FR 31239. For PM<sub>2.5</sub>, an area may be considered to be attaining the 1997 Annual PM<sub>2.5</sub> NAAQS if it meets the 1997 Annual PM<sub>2.5</sub> NAAQS, as determined in accordance with 40 CFR 50.13 and appendix N of part 50, based on three complete, consecutive calendar years of quality-assured air quality monitoring data. To attain these NAAQS, the 3-year average of the annual arithmetic mean concentration, as determined in accordance with 40 CFR part 50, appendix N, must be less than or equal to 15.0 µg/m<sup>3</sup> at all relevant monitoring sites in the subject area over a 3-year period. The relevant data must be collected and quality-assured in accordance with 40 CFR part 58 and recorded in the EPA Air Quality System (AQS) database. The monitors generally should have remained at the same location for the duration of the monitoring period required for demonstrating attainment.

On May 31, 2011, EPA determined that the Chattanooga TN-GA-AL Area was attaining the 1997 Annual PM<sub>2.5</sub> NAAQS. *See* 76 FR 31239. For that action, EPA reviewed PM<sub>2.5</sub>

monitoring data from monitoring stations in the Chattanooga TN-GA-AL Area for the 1997 Annual PM<sub>2.5</sub> NAAQS for 2007-2009. These data had been quality-assured by the respective state agencies and are recorded in AQS. In addition, on September 8, 2011, at 76 FR 55774, EPA finalized a determination that the Chattanooga TN-GA-AL Area attained the 1997 Annual PM<sub>2.5</sub> NAAQS by the applicable attainment date of April 5, 2010. As summarized in Table 1, below, the 3-year averages of annual arithmetic mean concentrations (i.e., design values) for the years 2009 through 2013 for the Chattanooga TN-GA-AL Area are below the 1997 Annual PM<sub>2.5</sub> NAAQS.

**Table 1. Design Value Concentrations for the Chattanooga TN-GA-AL Area for the 1997 Annual PM<sub>2.5</sub> NAAQS (µg/m<sup>3</sup>)**

Location	County	Site ID	3-Year Design Values				
			2007-2009	2008-2010	2009-2011	2010-2012	2011-2013
Rossville – Maple St., Georgia	Walker County, Georgia	132950002	12.5*	10.6	10.1	10.0	10.5
Siskin Drive/UTC, Tennessee	Hamilton County, Tennessee	470654002	12.9	11.6	11.1	10.9	10.0
Maxwell Road/East Ridge, Tennessee	Hamilton County, Tennessee	470650031	12.7	11.6	11.2	11.1	10.1
Soddy-Daisy High School, Tennessee	Hamilton County, Tennessee	470651011	11.1	10.7	11.0	11.2	9.8

\* Values subject to data substitution (76 FR 15895 (March 22, 2011)).

As discussed above, the design value for an area is the highest 3-year average of annual mean concentrations recorded at any monitor in the area. Therefore, the 3-year design value for the period on which Tennessee based its redesignation request (2007-2009) for the Chattanooga TN-GA-AL Area is  $12.9 \mu\text{g}/\text{m}^3$ , which is below the 1997 Annual  $\text{PM}_{2.5}$  NAAQS. Additional details can be found in EPA's final clean data determination for the Chattanooga TN-GA-AL Area. *See* 76 FR 31239 (May 31, 2011). EPA has reviewed more recent data which indicate that the Chattanooga TN-GA-AL Area continues to attain the 1997 Annual  $\text{PM}_{2.5}$  NAAQS beyond the submitted 3-year attainment period of 2007-2009. If the Area does not continue to attain before EPA finalizes the redesignation, EPA will not go forward with the redesignation. As discussed in more detail below, TDEC has committed to continue monitoring in this Area in accordance with 40 CFR part 58.

***Criteria (5) – Tennessee has met all Applicable Requirements under Section 110 and part D of the CAA; and Criteria (2) – Tennessee has a fully approved SIP under section 110(k) for the Tennessee Portion of the Chattanooga TN-GA-AL Area.***

For redesignating a nonattainment area to attainment, the CAA requires EPA to determine that the state has met all applicable requirements under section 110 and part D of title I of the CAA (CAA section 107(d)(3)(E)(v)) and that the state has a fully approved SIP under section 110(k) for the area (CAA section 107(d)(3)(E)(ii)). EPA proposes to find that Tennessee has met all applicable SIP requirements for the Tennessee portion of the Chattanooga TN-GA-AL Area under section 110 of the CAA (general SIP requirements) for purposes of redesignation. Additionally, EPA proposes to find that the Tennessee SIP satisfies the criterion that it meets applicable SIP requirements for purposes of redesignation under part D of title I of

the CAA (requirements specific to 1997 Annual PM<sub>2.5</sub> nonattainment areas) in accordance with section 107(d)(3)(E)(v). Further, EPA proposes to determine that the SIP is fully approved with respect to all requirements applicable for purposes of redesignation in accordance with section 107(d)(3)(E)(ii). In making these determinations, EPA ascertained which requirements are applicable to the Area and, if applicable, that they are fully approved under section 110(k). SIPs must be fully approved only with respect to requirements that were applicable prior to submittal of the complete redesignation request.

**a. The Tennessee portion of the Chattanooga TN-GA-AL Area has met all applicable requirements under section 110 and part D of the CAA.**

*General SIP requirements.* Section 110(a)(2) of title I of the CAA delineates the general requirements for a SIP, which include enforceable emissions limitations and other control measures, means, or techniques; provisions for the establishment and operation of appropriate devices necessary to collect data on ambient air quality; and programs to enforce the limitations. General SIP elements and requirements are delineated in section 110(a)(2) of title I, part A of the CAA. These requirements include, but are not limited to, the following: submittal of a SIP that has been adopted by the state after reasonable public notice and hearing; provisions for establishment and operation of appropriate procedures needed to monitor ambient air quality; implementation of a source permit program; provisions for the implementation of part C requirements (Prevention of Significant Deterioration (PSD)) and provisions for the implementation of part D requirements (New Source Review (NSR) permit programs); provisions for air pollution modeling; and provisions for public and local agency participation in planning and emission control rule development.

Section 110(a)(2)(D) requires that SIPs contain certain measures to prevent sources in a state from significantly contributing to air quality problems in another state. To implement this provision, EPA has required certain states to establish programs to address the interstate transport of air pollutants. The section 110(a)(2)(D) requirements for a state are not linked with a particular nonattainment area's designation and classification in that state. EPA believes that the requirements linked with a particular nonattainment area's designation and classifications are the relevant measures to evaluate in reviewing a redesignation request. The transport SIP submittal requirements, where applicable, continue to apply to a state regardless of the designation of any one particular area in the state. Thus, EPA does not believe that the CAA's interstate transport requirements should be construed to be applicable requirements for purposes of redesignation.

In addition, EPA believes other section 110 elements that are neither connected with nonattainment plan submissions nor linked with an area's attainment status are not applicable requirements for purposes of redesignation. The area will still be subject to these requirements after the area is redesignated. The section 110 and part D requirements which are linked with a particular area's designation and classification are the relevant measures to evaluate in reviewing a redesignation request. This approach is consistent with EPA's existing policy on applicability (i.e., for redesignations) of conformity and oxygenated fuels requirements, as well as with section 184 ozone transport requirements. *See* Reading, Pennsylvania, proposed and final rulemakings (61 FR 53174-53176, October 10, 1996), (62 FR 24826, May 7, 1997); Cleveland-Akron-Loraine, Ohio, final rulemaking (61 FR 20458, May 7, 1996); and Tampa, Florida, final rulemaking at (60 FR 62748, December 7, 1995). *See also* the discussion on this



issue in the Cincinnati, Ohio, redesignation (65 FR 37890, June 19, 2000), and in the Pittsburgh, Pennsylvania, redesignation (66 FR 50399, October 19, 2001).

On August 2, 2012, EPA approved all infrastructure SIP elements required under section 110(a)(2) for the 1997 Annual PM<sub>2.5</sub> NAAQS with the exception of the visibility element under section 110(a)(2)(D)(i)(II) (also known as “prong 4”). See 77 FR 45958. EPA approved prong 4 for the 1997 Annual PM<sub>2.5</sub> NAAQS on May 7, 2014. See 79 FR 26143. These requirements are, however, statewide requirements that are not linked to the PM<sub>2.5</sub> nonattainment status of the Area. As stated above, EPA believes that section 110 elements not linked to an area’s nonattainment status are not applicable for purposes of redesignation. Therefore, EPA believes it has approved all SIP elements under section 110 that must be approved as a prerequisite for the redesignation to attainment of the Tennessee portion of the Chattanooga TN-GA-AL Area.

*Title I, Part D, subpart 1 applicable SIP requirements.* EPA proposes to determine that the Tennessee SIP meets the applicable SIP requirements for the Tennessee portion of the Chattanooga TN-GA-AL Area for purposes of redesignation under part D of the CAA. Subpart 1 of part D, found in sections 172-176 of the CAA, sets forth the basic nonattainment requirements applicable to all nonattainment areas. All areas that were designated nonattainment for the 1997 Annual PM<sub>2.5</sub> NAAQS were designated under subpart 1 of the CAA. For purposes of evaluating this redesignation request, the applicable part D, subpart 1 SIP requirements for all nonattainment areas are contained in sections 172(c)(1)-(9) and in section 176. A thorough discussion of the requirements contained in section 172 can be found in the General Preamble for Implementation of title I. See 57 FR 13498 (April 16, 1992). Section VI of this proposed rulemaking notice discusses the relationship between this proposed redesignation action and subpart 4 of Part D.

*Subpart 1 Section 172 Requirements.* Section 172(c)(1) requires the plans for all nonattainment areas to provide for the implementation of all reasonably available control measures (RACM) as expeditiously as practicable and to provide for attainment of the NAAQS. EPA interprets this requirement to impose a duty on all nonattainment areas to consider all available control measures and to adopt and implement such measures as are reasonably available for implementation in each area as components of the area's attainment demonstration. Under section 172, states with nonattainment areas must submit plans providing for timely attainment and meeting a variety of other requirements.

EPA's longstanding interpretation of the nonattainment planning requirements of section 172 is that once an area is attaining the NAAQS, those requirements are not "applicable" for purposes of CAA section 107(d)(3)(E)(ii) and therefore need not be approved into the SIP before EPA can redesignate the area. In the 1992 General Preamble for Implementation of Title I, EPA set forth its interpretation of applicable requirements for purposes of evaluating redesignation requests when an area is attaining a standard. *See* 57 FR 13498, 13564 (April 16, 1992). EPA noted that the requirements for reasonable further progress and other measures designed to provide for attainment do not apply in evaluating redesignation requests because those nonattainment planning requirements "have no meaning" for an area that has already attained the standard. *Id.* This interpretation was also set forth in the Calcagni Memorandum. EPA's understanding of section 172 also forms the basis of its Clean Data Policy, which was articulated with regard to PM<sub>2.5</sub> in 40 CFR 51.1004(c), and suspends a state's obligation to submit most of the attainment planning requirements that would otherwise apply, including an attainment demonstration and planning SIPs to provide for reasonable further progress (RFP), RACM, and

contingency measures under section 172(c)(9).<sup>3</sup> Courts have upheld EPA's interpretation of section 172(c)(1)'s "reasonably available" control measures and control technology as meaning only those controls that advance attainment, which precludes the need to require additional measures where an area is already attaining. *NRDC v. EPA*, 571 F.3d 1245, 1252 (D.C. Cir. 2009); *Sierra Club v. EPA*, 294 F.3d 155, 162 (D.C. Cir. 2002); *Sierra Club v. EPA*, 314 F.3d 735, 744 (5th Cir. 2002).

Therefore, because attainment has been reached in the Chattanooga TN-GA-AL Area, no additional measures are needed to provide for attainment, and section 172(c)(1) requirements for an attainment demonstration and RACM are no longer considered to be applicable for purposes of redesignation as long as the Area continues to attain the standard until redesignation. The section 172(c)(2) requirement that nonattainment plans contain provisions promoting reasonable further progress toward attainment is also not relevant for purposes of redesignation because EPA has determined that the Chattanooga TN-GA-AL Area has monitored attainment of the 1997 Annual PM<sub>2.5</sub> NAAQS. In addition, because the Chattanooga TN-GA-AL Area has attained the 1997 Annual PM<sub>2.5</sub> NAAQS and is no longer subject to a RFP requirement, the requirement to submit the section 172(c)(9) contingency measures is not applicable for purposes of redesignation. Section 172(c)(6) requires the SIP to contain control measures necessary to provide for attainment of the NAAQS. Because attainment has been reached, no additional measures are needed to provide for attainment.

Section 172(c)(3) requires submission and approval of a comprehensive, accurate, and current inventory of actual emissions. On February 8, 2012, EPA approved Tennessee's 2002

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<sup>3</sup> This regulation was promulgated as part of the 1997 PM<sub>2.5</sub> NAAQS implementation rule that was subsequently challenged and remanded in *NRDC v. EPA*, 706 F.3d 428 (D.C. Cir. 2013), as discussed in Section VI of this document. However, the Clean Data Policy portion of the implementation rule was not at issue in that case.

base-year emissions inventory for the Tennessee portion of the Chattanooga TN-GA-AL Area as part of the SIP revision submitted by TDEC to provide for attainment of the 1997 PM<sub>2.5</sub> NAAQS in the Area. *See* 77 FR 6467.

Section 172(c)(4) requires the identification and quantification of allowable emissions for major new and modified stationary sources to be allowed in an area, and section 172(c)(5) requires source permits for the construction and operation of new and modified major stationary sources anywhere in the nonattainment area. EPA has determined that, since PSD requirements will apply after redesignation, areas being redesignated need not comply with the requirement that a NSR program be approved prior to redesignation, provided that the area demonstrates maintenance of the NAAQS without part D NSR. A more detailed rationale for this view is described in a memorandum from Mary Nichols, Assistant Administrator for Air and Radiation, dated October 14, 1994, entitled “Part D New Source Review Requirements for Areas Requesting Redesignation to Attainment.” Tennessee has demonstrated that the Tennessee portion of the Chattanooga TN-GA-AL Area will be able to maintain the NAAQS without part D NSR in effect, and therefore Tennessee need not have fully approved part D NSR programs prior to approval of the redesignation request. Tennessee’s PSD program will become effective in the Tennessee portion of the Chattanooga TN-GA-AL Area upon redesignation to attainment.

Section 172(c)(7) requires the SIP to meet the applicable provisions of section 110(a)(2). As noted above, EPA believes the Tennessee SIP meets the requirements of section 110(a)(2) applicable for purposes of redesignation.

*176 Conformity Requirements.* Section 176(c) of the CAA requires states to establish criteria and procedures to ensure that federally-supported or funded projects conform to the air quality planning goals in the applicable SIP. The requirement to determine conformity applies to

transportation plans, programs, and projects that are developed, funded, or approved under title 23 of the United States Code (U.S.C.) and the Federal Transit Act (transportation conformity) as well as to all other federally-supported or funded projects (general conformity). State transportation conformity SIP revisions must be consistent with federal conformity regulations relating to consultation, enforcement, and enforceability that EPA promulgated pursuant to its authority under the CAA.

EPA believes that it is reasonable to interpret the conformity SIP requirements<sup>4</sup> as not applying for purposes of evaluating the redesignation request under section 107(d) because state conformity rules are still required after redesignation and federal conformity rules apply where state rules have not been approved. *See Wall v. EPA*, 265 F.3d 426 (upholding this interpretation) (6th Cir. 2001); *See* 60 FR 62748 (December 7, 1995).

Thus, for the reasons discussed above, the Tennessee portion of the Chattanooga TN-GA-AL Area has satisfied all applicable requirements for purposes of redesignation under section 110 and part D of the CAA.

**b. The Tennessee portion of the Chattanooga TN-GA-AL Area has a fully approved applicable SIP under section 110(k) of the CAA.**

EPA has fully approved the applicable Tennessee SIP for the Tennessee portion of the Chattanooga TN-GA-AL Area for the 1997 Annual PM<sub>2.5</sub> NAAQS under section 110(k) of the CAA for all requirements applicable for purposes of redesignation. EPA may rely on prior SIP approvals in approving a redesignation request (see Calcagni Memorandum at p. 3; *Southwestern Pennsylvania Growth Alliance v. Browner*, 144 F.3d 984 (6<sup>th</sup> Cir. 1998); *Wall*, 265 F.3d 426)

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<sup>4</sup> CAA Section 176(c)(4)(E) requires states to submit revisions to their SIPs to reflect certain federal criteria and procedures for determining transportation conformity. Transportation conformity SIPs are different from the motor vehicle emission budgets that are established in control strategy SIPs and maintenance plans.

plus any additional measures it may approve in conjunction with a redesignation action. *See* 68 FR 25426 (May 12, 2003) and citations therein. Following passage of the CAA of 1970, Tennessee has adopted and submitted, and EPA has fully approved at various times, provisions addressing the various SIP elements applicable for the 1997 Annual PM<sub>2.5</sub> NAAQS in the Tennessee portion of the Chattanooga TN-GA-AL Area (e.g., 77 FR 45958, August 2, 2012).

As indicated above, EPA believes that the section 110 elements not connected with nonattainment plan submissions and not linked to the area's nonattainment status are not applicable requirements for purposes of redesignation.

***Criteria (3) - The air quality improvement in the Chattanooga TN-GA-AL Area is due to permanent and enforceable reductions in emissions resulting from implementation of the SIP and applicable federal air pollution control regulations and other permanent and enforceable reductions.***

For redesignating a nonattainment area to attainment, the CAA requires EPA to determine that the air quality improvement in the area is due to permanent and enforceable reductions in emissions resulting from implementation of the SIP and applicable Federal air pollution control regulations and other permanent and enforceable reductions (CAA section 107(d)(3)(E)(iii)). EPA believes that Tennessee has demonstrated that the observed air quality improvement in the Chattanooga TN-GA-AL Area is due to permanent and enforceable reductions in emissions resulting from implementation of the SIP and Federal measures.

Fine particulate matter, or PM<sub>2.5</sub>, refers to airborne particles less than or equal to 2.5 micrometers in diameter. Although treated as a single pollutant, fine particles come from many different sources and are composed of many different compounds. In the Chattanooga TN-GA-

AL Area, one of the largest components of PM<sub>2.5</sub> is sulfate, which is formed through various chemical reactions from the precursor SO<sub>2</sub>. The other major component of PM<sub>2.5</sub> is organic carbon, which originates predominantly from biogenic emission sources. Nitrate, which is formed from the precursor NO<sub>x</sub>, is also a component of PM<sub>2.5</sub>. Crustal materials from windblown dust and elemental carbon from combustion sources are less significant contributors to total PM<sub>2.5</sub>. VOCs, also precursors for PM, are emitted from a variety of sources, including motor vehicles, chemical plants, refineries, factories, consumer and commercial products, and other industrial sources. VOCs also are emitted by natural sources such as vegetation.

Federal measures enacted in recent years have resulted in permanent emission reductions in particulate matter and its precursors. Most of these emission reductions are enforceable through regulations. The Federal measures that have been implemented include:

*Tier 2 vehicle standards and low-sulfur gasoline.* In addition to requiring NO<sub>x</sub> controls, the Tier 2 rule reduced the allowable sulfur content of gasoline to 30 parts per million (ppm) starting in January of 2006. Most gasoline sold prior to this had a sulfur content of approximately 300 ppm.

*Heavy-duty gasoline and diesel highway vehicle standards & Ultra Low-Sulfur Diesel Rule.* On October 6, 2000, the U.S. EPA promulgated a rule to reduce NO<sub>x</sub> and VOC emissions from heavy-duty gasoline and diesel highway vehicles that began to take effect in 2004. *See* 65 FR 59896. A second phase of standards and testing procedures began in 2007 to reduce particulate matter from heavy-duty highway engines, and reduce highway diesel fuel sulfur content to 15 ppm since the sulfur in fuel damages high efficiency catalytic exhaust emission control devices. The total program should achieve a 90 percent reduction in PM emissions and a

95 percent reduction in NO<sub>x</sub> emission for new engines using low-sulfur diesel, compared to existing engines using higher-content sulfur diesel.

*Non-road, large spark-ignition engines and recreational engines standards.* The non-road spark-ignition and recreational engine standards, effective in July 2003, regulate NO<sub>x</sub>, hydrocarbons, and carbon monoxide from groups of previously unregulated non-road engines. These engine standards apply to large spark-ignition engines (e.g., forklifts and airport ground service equipment), recreational vehicles (e.g., off-highway motorcycles and all-terrain-vehicles), and recreational marine diesel engines sold in the United States and imported after the effective date of these standards.

When all of the non-road spark-ignition and recreational engine standards are fully implemented, an overall 72 percent reduction in hydrocarbons, 80 percent reduction in NO<sub>x</sub>, and 56 percent reduction in carbon monoxide emissions are expected by 2020. These controls will help reduce ambient concentrations of ozone, carbon monoxide, and fine particulate matter.

*Large non-road diesel engine standards.* Promulgated in 2004, this rule was phased in between 2008 and 2014. This rule will reduce sulfur content in non-road diesel fuel and, when fully implemented, will reduce NO<sub>x</sub> and direct PM<sub>2.5</sub> emissions by over 90 percent from these engines.

*Reciprocating Internal Combustion Engine standard.* Initially promulgated in 2010, this rule regulates emissions of air toxics from existing diesel powered stationary reciprocating internal combustion engines that meet specific site rating, age, and size criteria. With all of the reciprocating internal combustion engine standards fully implemented in 2013, EPA estimates that PM<sub>2.5</sub> emissions from these engines have been reduced by approximately 2,800 tons per year (tpy).



*Category 3 Marine Diesel Engine standard.* Promulgated in 2010, this rule establishes more stringent exhaust emission standards for new large marine diesel engines with per cylinder displacement at or above 30 liters (commonly referred to as Category 3 compression-ignition marine engines) as part of a coordinated strategy to address emissions from all ships that affect U.S. air quality. Near-term standards for newly built engines applied beginning in 2011, and long-term standards requiring an 80 percent reduction in NO<sub>x</sub> emissions will begin in 2016.

*NO<sub>x</sub> SIP Call.* On October 27, 1998 (63 FR 57356), EPA issued a NO<sub>x</sub> SIP Call requiring the District of Columbia and 22 states to reduce emissions of NO<sub>x</sub>. Affected states were required to comply with Phase I of the SIP Call beginning in 2004 and Phase II beginning in 2007. Emission reductions resulting from regulations developed in response to the NO<sub>x</sub> SIP Call are permanent and enforceable.

*CAIR and CSAPR.* The Clean Air Interstate Rule (CAIR) was promulgated in 2005 and required 28 eastern states and the District of Columbia to significantly reduce emissions of SO<sub>2</sub> and NO<sub>x</sub> from electric generating units (EGUs) in order to limit the interstate transport of these pollutants and the ozone and fine particulate matter they form in the atmosphere. *See* 70 FR 25162 (May 12, 2005). In 2008, the D.C. Circuit initially vacated CAIR, *North Carolina v. EPA*, 531 F.3d 896 (D.C. Cir. 2008), but ultimately remanded the rule to EPA without vacatur to preserve the environmental benefits provided by CAIR, *North Carolina v. EPA*, 550 F.3d 1176, 1178 (D.C. Cir. 2008). On August 8, 2011, acting on the Court's remand, EPA promulgated CSAPR, to address interstate transport of emissions and resulting secondary air pollutants and to replace CAIR (76 FR 48208).<sup>5</sup> CSAPR requires substantial reductions of SO<sub>2</sub> and NO<sub>x</sub> emissions from EGUs in 28 states in the Eastern United States. Implementation of the rule was

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<sup>5</sup> CAIR addressed the 1997 PM<sub>2.5</sub> Annual standard and the 1997 8-hour ozone standard. CSAPR addresses contributions from upwind states to downwind nonattainment and maintenance of the 2006 24-hour PM<sub>2.5</sub> standard as well as the ozone and PM<sub>2.5</sub> NAAQS addressed by CAIR.

scheduled to begin on January 1, 2012, when CSAPR's cap-and-trade programs would have superseded the CAIR cap-and-trade programs. Numerous parties filed petitions for review of CSAPR, and on December 30, 2011, the D.C. Circuit issued an order staying CSAPR pending resolution of the petitions and directing EPA to continue to administer CAIR. *EME Homer City Generation, L.P. v. EPA*, No. 11-1302 (D.C. Cir. Dec. 30, 2011), Order at 2.

On August 21, 2012, the D.C. Circuit issued its ruling, vacating and remanding CSAPR to the Agency and once again ordering continued implementation of CAIR. *EME Homer City Generation, L.P. v. EPA*, 696 F.3d 7, 38 (D.C. Cir. 2012). The D.C. Circuit subsequently denied EPA's petition for rehearing en banc. *EME Homer City Generation, L.P. v. EPA*, No. 11-1302, 2013 WL 656247 (D.C. Cir. Jan. 24, 2013), at \*1. EPA and other parties then petitioned the Supreme Court for a writ of certiorari, and the Supreme Court granted the petitions on June 24, 2013. *EPA v. EME Homer City Generation, L.P.*, 133 S. Ct. 2857 (2013).

On April 29, 2014, the Supreme Court vacated and reversed the D.C. Circuit's decision regarding CSAPR and remanded that decision to the D.C. Circuit to resolve remaining issues in accordance with its ruling. *EPA v. EME Homer City Generation, L.P.*, 134 S. Ct. 1584 (2014). EPA filed a motion to lift the stay in light of the Supreme Court decision, and on October 23, 2014, the D.C. Circuit granted EPA's motion. *EME Homer City Generation, L.P. v. EPA*, Case No. 11-1302, Document No. 1518738. EPA subsequently issued an interim final rule amending the Code of Federal Regulations to correctly reflect the compliance deadlines for CSAPR as revised by the effect of the Court's order granting EPA's motion to lift the stay of CSAPR and delay its deadlines by three years. *See* 79 FR 71663 (December 3, 2014). These amendments make clear that, consistent with the Court's order, compliance with CSAPR's Phase 1 emissions budgets is now required in 2015 and 2016 (instead of 2012 and 2013) and compliance with the

rule's Phase 2 emissions budgets and assurance provisions is now required in 2017 and beyond (instead of 2014 and beyond).

EPA approved a modification to Tennessee's SIP on November 25, 2009, that addressed the requirements of CAIR for the purpose of reducing SO<sub>2</sub> and NO<sub>x</sub> emissions (*see* 74 FR 61535), and Tennessee's SIP redesignation request lists CAIR/CSAPR as a control measure. CAIR was in place and getting emission reductions when the Chattanooga TN-GA-AL Area began monitoring attainment of the 1997 Annual PM<sub>2.5</sub> NAAQS. The quality-assured, certified monitoring data used to demonstrate the area's attainment of the 1997 Annual PM<sub>2.5</sub> NAAQS by the April 5, 2010, attainment deadline was also impacted by CAIR. However, EPA conducted an air quality modeling analysis as part of the CSAPR rulemaking which demonstrates that the Chattanooga TN-GA-AL Area would be able to maintain the 1997 Annual PM<sub>2.5</sub> NAAQS even in the absence of either CAIR or CSAPR. *See* "Air Quality Modeling Final Rule Technical Support Document," App. B-40 and B-59.<sup>6</sup> This modeling is available in the docket for this proposed redesignation action. In addition, as noted above, the D.C. Circuit has lifted the stay of CSAPR and EPA has made ministerial amendments to CSAPR consistent with the Court's order. Therefore, to the extent that these transport rules impact attainment of the 1997 Annual PM<sub>2.5</sub> NAAQS in the Chattanooga TN-GA-AL Area, any emission reductions associated with CAIR that helped the Chattanooga TN-GA-AL Area achieve attainment of the 1997 Annual PM<sub>2.5</sub> NAAQS are permanent and enforceable for purposes of redesignation under section 107(d)(3)(E)(iii) of the CAA because CSAPR requires similar or greater emission reductions from relevant upwind areas starting in 2015 and beyond.

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<sup>6</sup> The air quality modeling analysis for the CSAPR rulemaking did not identify any of the four monitors in the Chattanooga TN-GA-AL Area as receptors.

***Criteria (4) - The Tennessee portion of the Chattanooga TN-GA-AL Area has a fully approved maintenance plan pursuant to section 175A of the CAA.***

For redesignating a nonattainment area to attainment, the CAA requires EPA to determine that the area has a fully approved maintenance plan pursuant to section 175A of the CAA (CAA section 107(d)(3)(E)(iv)). In conjunction with its request to redesignate the Tennessee portion of the Chattanooga TN-GA-AL Area to attainment for the 1997 Annual PM<sub>2.5</sub> NAAQS, TDEC submitted a SIP revision to provide for the maintenance of the 1997 Annual PM<sub>2.5</sub> NAAQS for at least 10 years after the effective date of redesignation to attainment. EPA believes that this maintenance plan meets the requirements for approval under section 175A of the CAA.

*a. What is required in a maintenance plan?*

Section 175A of the CAA sets forth the elements of a maintenance plan for areas seeking redesignation from nonattainment to attainment. Under section 175A, the plan must demonstrate continued attainment of the applicable NAAQS for at least 10 years after the Administrator approves a redesignation to attainment. Eight years after the redesignation, TDEC must submit a revised maintenance plan which demonstrates that attainment will continue to be maintained for the 10 years following the initial 10-year period. To address the possibility of future NAAQS violations, the maintenance plan must contain such contingency measures, as EPA deems necessary, to assure prompt correction of any future 1997 Annual PM<sub>2.5</sub> violations. The Calcagni Memorandum provides further guidance on the content of a maintenance plan, explaining that a maintenance plan should address five requirements: the attainment emissions inventory,

maintenance demonstration, monitoring, verification of continued attainment, and a contingency plan. As is discussed below, EPA proposes to find that TDEC's maintenance plan includes all the necessary components and is thus proposing to approve it as a revision to the Tennessee SIP.

*b. CAA 175 Maintenance Plan Requirements*

*1. Attainment Emissions Inventory*

The Chattanooga TN-GA-AL Area attained the 1997 Annual PM<sub>2.5</sub> NAAQS based on monitoring data for the 3-year period from 2007-2009. TDEC has selected 2007 as the attainment emission inventory year. The attainment inventory identifies a level of emissions in the Area that is sufficient to attain the 1997 Annual PM<sub>2.5</sub> NAAQS. TDEC began development of the attainment inventory by first generating a baseline emissions inventory for the Tennessee portion of the Chattanooga TN-GA-AL Area. As noted above, the year 2007 was chosen as the base year for developing a comprehensive emissions inventory for direct PM<sub>2.5</sub> and PM<sub>2.5</sub> precursors SO<sub>2</sub> and NO<sub>x</sub>. Emissions projections to support maintenance through 2025 have been prepared for the years 2010, 2013, 2016, 2019, 2022, and 2025. The projected inventory included with the maintenance plan estimates emissions forward to 2025, which satisfies the 10-year interval required in section 175(A) of the CAA.

The emissions inventories are composed of four major types of sources: point, area, on-road mobile, and non-road mobile. The projected annual emissions from point and area sources were determined by applying Economic Growth Analysis System version 5.0 for Hamilton County to respective attainment year emissions. The projected annual emissions from onroad mobile sources within Hamilton County for 2025 were determined by using the MOVES2010b model. Projected annual emissions from nonroad mobile sources within Hamilton County were

determined by using the NONROAD2008a model. The 2007 SO<sub>2</sub>, NO<sub>x</sub>, and PM<sub>2.5</sub> emissions for the Tennessee portion of the Chattanooga TN-GA-AL Area, as well as the emissions for other years, were developed consistent with EPA guidance and are summarized in Tables 2 through 6 of the following subsection discussing the maintenance demonstration.

## 2. *Maintenance Demonstration*

The November 13, 2014, final submittal includes a maintenance plan for the Tennessee portion of the Chattanooga TN-GA-AL Area. This demonstration:

- (i) Shows compliance with and maintenance of the Annual PM<sub>2.5</sub> standard by providing information to support the demonstration that current and future emissions of SO<sub>2</sub>, NO<sub>x</sub>, and PM<sub>2.5</sub> will remain below 2007 emission levels.
- (ii) Uses 2007 as the attainment year and includes future emission inventory projections for 2010, 2013, 2016, 2019, 2022, and 2025.
- (iii) Identifies an “out year” at least 10 years after EPA review and potential approval of the maintenance plan. Per 40 CFR part 93, NO<sub>x</sub> and PM<sub>2.5</sub> MVEBs were established for the last year (2025) of the maintenance plan.
- (iv) Provides, as shown in Tables 2, 3, 4, 5, and 6 below, the actual and projected emissions inventories, in tpy, for the Tennessee portion of the Chattanooga TN-GA-AL Area.

**Table 2 – Actual (2007) and Projected Point Source Emissions for the Tennessee portion of the Chattanooga TN-GA-AL Area (tons)**

<b>Pollutant</b>	<b>2007</b>	<b>2010</b>	<b>2013</b>	<b>2016</b>	<b>2019</b>	<b>2022</b>	<b>2025</b>
SO <sub>2</sub>	919.2	797.5	808.1	798.0	819.4	842.1	865.6
NO <sub>x</sub>	2,437.2	2,484.1	2,575.6	2,650.6	2,811.6	2,982.2	3,154.6
PM <sub>2.5</sub>	160.2	156.3	158.2	169.2	180.7	193.1	205.8

**Table 3 – Actual (2007) and Projected Non-point Source Emissions for the Tennessee portion of the Chattanooga TN-GA-AL Area (tons)**

<b>Pollutant</b>	<b>2007</b>	<b>2010</b>	<b>2013</b>	<b>2016</b>	<b>2019</b>	<b>2022</b>	<b>2025</b>
SO <sub>2</sub>	332.6	346.7	363.2	382.9	401.1	420.6	441.1
NO <sub>x</sub>	3,415.1	3,638.0	3,835.2	4,089.8	4,348.5	4,609.0	4,880.6
PM <sub>2.5</sub>	875.4	916.6	955.8	1,001.2	1,042.6	1,083.6	1,121.9

**Table 4 – Actual (2007) and Projected On-road Mobile Sources Emissions for the Tennessee portion of the Chattanooga TN-GA-AL Area (tons)**

<b>Pollutant</b>	<b>2007</b>	<b>2010</b>	<b>2013</b>	<b>2016</b>	<b>2019</b>	<b>2022</b>	<b>2025</b>
SO <sub>2</sub>	87.6	77.1	66.5	56.0	45.5	34.9	24.4
NO <sub>x</sub>	11,465.2	9,972.4	8,479.7	6,986.9	5,494.2	4,001.5	2,508.7
PM <sub>2.5</sub>	395.1	342.0	288.9	235.8	182.7	129.6	79.5

**Table 5 – Actual (2007) and Projected Non-road Mobile Source Emissions for the Tennessee portion of the Chattanooga TN-GA-AL Area (tons)**

<b>Pollutant</b>	<b>2007</b>	<b>2010</b>	<b>2013</b>	<b>2016</b>	<b>2019</b>	<b>2022</b>	<b>2025</b>
SO <sub>2</sub>	99.3	25.9	15.2	14.2	14.7	15.3	15.9
NO <sub>x</sub>	1,792.1	1,562.6	1,264.3	1,003.4	833.6	730.8	675.2
PM <sub>2.5</sub>	153.6	141.6	123.7	101.0	82.4	70.4	63.5

**Table 6 – Actual (2007) and Projected Emissions for all sectors for the Tennessee portion of the Chattanooga TN-GA-AL Area (tons)**

<b>Pollutant</b>	<b>2007</b>	<b>2010</b>	<b>2013</b>	<b>2016</b>	<b>2019</b>	<b>2022</b>	<b>2025</b>
SO <sub>2</sub>	1,438.8	1,247.2	1,253.2	1,251.1	1,280.7	1,312.9	1,346.9
NO <sub>x</sub>	19,109.5	17,657.2	16,154.7	14,730.8	13,487.9	12,323.4	11,219.1
PM <sub>2.5</sub>	1,584.3	1,556.5	1,526.6	1,507.3	1,488.4	1,476.7	1,467.8

Table 2 shows a slight increase of NO<sub>x</sub>, and PM<sub>2.5</sub> from point sources, and Table 3 indicates a slight increase of NO<sub>x</sub>, SO<sub>2</sub>, and PM<sub>2.5</sub> from nonpoint emission sources. Table 6 reflects the overall emissions from all source categories in the Tennessee portion of the Chattanooga, TN-GA-AL. Overall emissions from all source categories combined for all three pollutants, NO<sub>x</sub>, SO<sub>2</sub>, and PM<sub>2.5</sub>, are projected to decrease from 2007 to 2025. In situations where local emissions are the primary contributor to nonattainment, such as the Chattanooga TN-GA-AL Area, if the future projected emissions in the nonattainment area remain at or below the baseline emissions in the nonattainment area, then the ambient air quality standard should not be exceeded in the future. As explained below, EPA proposes to find that the overall emission projections illustrate that the Chattanooga TN-GA-AL Area is expected to continue to attain the



1997 Annual PM<sub>2.5</sub> NAAQS through 2025.<sup>7</sup> Emissions of SO<sub>2</sub>, NO<sub>x</sub>, and PM<sub>2.5</sub> are projected to decline by 6.4 percent, 41.3 percent and 7.4 percent, respectively, from 2007 to 2025.

A maintenance plan requires the state to show that projected future year overall emissions will not exceed the level of emissions which led the Area to attain the NAAQS. For the reasons discussed above, EPA preliminarily agrees that Tennessee's projected emissions demonstrate that the Chattanooga TN-GA-AL Area will continue to attain for the duration of the maintenance plan.

### *3. Monitoring Network*

There are currently three monitors measuring ambient PM<sub>2.5</sub> in the Chattanooga TN-GA-AL Area. TDEC has committed to continue operation of the monitors in the Tennessee portion of Chattanooga TN-GA-AL Area in compliance with 40 CFR part 58 and have thus addressed the requirement for monitoring. EPA approved Tennessee's 2013 monitoring plan on November 14, 2013. In addition, there is currently one monitor measuring ambient PM<sub>2.5</sub> in the Georgia portion of the Chattanooga TN-GA-AL Area. Georgia Environmental Protection Division (GA EPD) has committed to continue operation of the monitor in the Georgia portion of the Chattanooga TN-GA-AL Area in compliance with 40 CFR part 58 and has thus addressed the requirement for monitoring. On December 19, 2014, EPA approved GA EPD's submittal to redesignate the Georgia portion of Chattanooga TN-GA-AL Area from nonattainment to attainment for the 1997 Annual PM<sub>2.5</sub> NAAQS. *See* 79 FR 75748. There is no monitor in the Alabama portion of the Chattanooga TN-GA-AL Area.

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<sup>7</sup> In separate actions, EPA approved the redesignation requests and associated maintenance plans for the Alabama and Georgia portions of the Area. *See* 79 FR 76235 (December 22, 2014) and 79 FR 75748 (December 19, 2014), respectively. Therefore, EPA does not believe that projected emissions from those portions of the Area present a maintenance problem for air quality in the Area as a whole.

#### 4. *Verification of Continued Attainment*

TDEC has the legal authority to enforce and implement the requirements of the Tennessee portion of the Chattanooga TN-GA-AL Area 1997 Annual PM<sub>2.5</sub> maintenance plan. This includes the authority to adopt, implement, and enforce any subsequent emissions control contingency measures determined to be necessary to correct future PM<sub>2.5</sub> attainment problems.

TDEC will track the progress of the maintenance plan by performing future reviews of triennial emission inventories for the Tennessee portion of the Chattanooga TN-GA-AL Area as required in the Air Emissions Reporting Rule (AERR) and Consolidated Emissions Reporting Rule (CERR). For these periodic inventories, TDEC will review the assumptions made for the purpose of the maintenance demonstration concerning projected growth of activity levels. If any of these assumptions appear to have changed substantially, then TDEC will re-project emissions for the Tennessee portion of the Chattanooga TN-GA-AL Area.

#### 5. *Contingency Measures in the Maintenance Plan.*

Section 175A of the CAA requires that a maintenance plan include such contingency measures as EPA deems necessary to assure that the state will promptly correct a violation of the NAAQS that occurs after redesignation. The maintenance plan should identify the contingency measures to be adopted, a schedule and procedure for adoption and implementation, and a time limit for action by the state. A state should also identify specific indicators to be used to determine when the contingency measures need to be implemented. The maintenance plan must include a requirement that a state will implement all measures with respect to control of the pollutant that were contained in the SIP before redesignation of the area to attainment in accordance with section 175A(d). TDEC has identified the following possible means for

providing further reductions in emissions of PM<sub>2.5</sub> and/or its significant precursors as contingency measures for emission sources within Hamilton County:

- Reasonably available control technology (RACT) for point sources of PM<sub>2.5</sub> emissions not already covered by RACT, best available control technology, or reasonable and proper emission limitations;
- RACM for area sources of PM<sub>2.5</sub> emissions;
- RACT for major point-sources of NO<sub>x</sub> emissions;
- RACT for minor point-sources of NO<sub>x</sub> emissions;
- RACM for area sources of NO<sub>x</sub> emissions;
- RACT for major point-sources of SO<sub>2</sub> emissions;
- RACT for minor point-sources of SO<sub>2</sub> emissions;
- RACM for area sources of SO<sub>2</sub> emissions; and
- Additional PM<sub>2.5</sub>, NO<sub>x</sub>, and/or SO<sub>2</sub> emissions reduction measures yet to be identified.

The contingency plan included in the submittal includes a triggering mechanism to determine when contingency measures are needed and a process of developing and implementing appropriate control measures. TDEC will use actual ambient monitoring data to determine whether a trigger event has occurred and when contingency measures should be implemented.

An exceedance of the 1997 Annual PM<sub>2.5</sub> NAAQS of 15.0 µg/m<sup>3</sup> at any federal reference method (FRM) monitor in the Chattanooga TN-GA-AL maintenance area, based on quality-assured and certified monitoring data averaged over three consecutive calendar years, will trigger a comprehensive evaluation by TDEC to determine if contingency measures should be implemented. Furthermore, such an evaluation will also be triggered by the occurrence of any of

the following conditions that may forewarn of a potential exceedance of the annual PM<sub>2.5</sub> NAAQS.

- An annual mean PM<sub>2.5</sub> concentration (average of quarterly-average concentrations) of greater than or equal to 16.5 µg/m<sup>3</sup> for the previous calendar year at any FRM monitor in the Chattanooga TN-GA-AL maintenance area, based on quality-assured and certified monitoring data;
- An annual mean PM<sub>2.5</sub> (average of quarterly-average concentrations) of greater than or equal to 15.5 µg/m<sup>3</sup> for each of the previous two consecutive calendar years at any FRM monitor in the Chattanooga TN-GA-AL maintenance area, based on the quality-assured and certified monitoring data;
- Total emissions of PM<sub>2.5</sub> in the most recent NEI for Hamilton County of greater than 2,059 tons, which is thirty percent more than the corresponding emissions for 2007, the attainment year; and
- Total emissions of SO<sub>2</sub> in the most recent NEI for Hamilton County of greater than 1,870 tons, which is thirty percent more than the corresponding emissions for 2007.

Upon occurrence of a contingency measure trigger, the required comprehensive evaluation will be conducted to determine the cause(s) of the elevated ambient PM<sub>2.5</sub> concentrations or emissions inventory increase, to determine if an exceedance of the annual PM<sub>2.5</sub> NAAQS is likely to occur or continue, and to determine whether or not the adoption and implementation of appropriate contingency measures is required for the further reduction of emissions of PM<sub>2.5</sub> and/or its significant precursors within Hamilton County. The evaluation will examine:

- Severity of the trigger condition;
- Potentially contributing emissions from sources within Hamilton County;
- Potentially contributing emissions resulting from regional or long-range transport;
- Potentially contributing meteorological conditions, if applicable;
- Emission trends for all source types;
- Future emissions reductions from any adopted or planned regulations or initiatives;
- Current and recently identified emissions control technologies applicable to considered contingency measures;
- Emissions reduction potential of considered contingency measures;
- Technical and economic feasibility of considered contingency measures;
- Possible geographic limitations of considered contingency measures; and
- Implementation timeline of considered contingency measures.

EPA has concluded that the maintenance plan adequately addresses the five basic components required: the attainment emissions inventory, maintenance demonstration, monitoring, verification of continued attainment, and a contingency plan. Therefore, the maintenance plan SIP revision submitted by TDEC for the Tennessee portion of the Chattanooga TN-GA-AL Area meets the requirements of section 175A of the CAA and is approvable.

**VI. What is the Effect of the January 4, 2013, D.C. Circuit Decision Regarding PM<sub>2.5</sub> Implementation under Subpart 4?**

*a. Background*

As discussed in Section I of this action, the D.C. Circuit remanded the 1997 PM<sub>2.5</sub> Implementation Rule to EPA on January 4, 2013, in *Natural Resources Defense Council v. EPA*, 706 F.3d 428. The court found that EPA erred in implementing the 1997 PM<sub>2.5</sub> NAAQS pursuant to the general implementation provisions of subpart 1 of part D of Title I of the CAA rather than the particulate matter-specific provisions of subpart 4 of part D of Title I.

*b. Proposal on this Issue*

In this portion of the proposed redesignation, EPA addresses the effect of the Court's January 4, 2013, ruling on the proposed redesignation. As explained below, EPA is proposing to determine that the Court's January 4, 2013, decision does not prevent EPA from redesignating the Tennessee portion of the Chattanooga TN-GA-AL Area to attainment. Even in light of the Court's decision, redesignation for this area is appropriate under the CAA and EPA's longstanding interpretations of the CAA's provisions regarding redesignation. EPA first explains its longstanding interpretation that requirements that are imposed, or that become due, after a complete redesignation request is submitted for an area that is attaining the standard, are not applicable for purposes of evaluating a redesignation request. Second, EPA then shows that, even if EPA applies the subpart 4 requirements to the Tennessee portion of the Chattanooga TN-GA-AL Area redesignation request and disregards the provisions of its 1997 PM<sub>2.5</sub> Implementation Rule remanded by the Court, the State's request for redesignation of the

Tennessee portion of the Chattanooga TN-GA-AL Area still qualifies for approval. EPA's discussion takes into account the effect of the Court's ruling on the maintenance plan for the Tennessee portion of the Chattanooga TN-GA-AL Area, which EPA views as approvable when subpart 4 requirements are considered.

*c. Applicable Requirements for the Purpose of Evaluating the Redesignation Request*

With respect to the 1997 PM<sub>2.5</sub> Implementation Rule, the Court's January 4, 2013, ruling rejected EPA's reasons for implementing the PM<sub>2.5</sub> NAAQS solely in accordance with the provisions of subpart 1 and remanded that matter to EPA to address implementation of the 1997 PM<sub>2.5</sub> NAAQS under subpart 4 of part D of the CAA, in addition to subpart 1. For the purposes of evaluating Tennessee's redesignation request for the Tennessee portion of the Chattanooga TN-GA-AL Area, to the extent that implementation under subpart 4 would impose additional requirements for areas designated nonattainment, EPA believes that those requirements are not "applicable" for the purposes of CAA section 107(d)(3)(E), and thus EPA is not required to consider subpart 4 requirements with respect to the redesignation of the Tennessee portion of the Chattanooga TN-GA-AL Area. Under its longstanding interpretation of the CAA, EPA has interpreted section 107(d)(3)(E) to mean, as a threshold matter, that the part D provisions which are "applicable" and which must be approved in order for EPA to redesignate an area include only those which came due prior to a state's submittal of a complete redesignation request. *See* "Procedures for Processing Requests to Redesignate Areas to Attainment," Memorandum from John Calcagni, Director, Air Quality Management Division, September 4, 1992 (Calcagni memorandum). *See also* "State Implementation Plan (SIP) Requirements for Areas Submitting Requests for the plan and Redesignation to Attainment of the Ozone and Carbon Monoxide (CO)

National Ambient Air Quality Standards (NAAQS) on or after November 15, 1992,” Memorandum from Michael Shapiro, Acting Assistant Administrator, Air and Radiation, September 17, 1993 (Shapiro memorandum); Final Redesignation of Detroit-Ann Arbor, (60 FR 12459, 12465-66, March 7, 1995); Final Redesignation of St. Louis, Missouri, (68 FR 25418, 25424-27, May 12, 2003); *Sierra Club v. EPA*, 375 F.3d 537, 541 (7th Cir. 2004) (upholding EPA’s redesignation rulemaking applying this interpretation and expressly rejecting Sierra Club’s view that the meaning of “applicable” under the statute is “whatever should have been in the plan at the time of attainment rather than whatever actually was in already implemented or due at the time of attainment”).<sup>8</sup> In this case, at the time that Tennessee submitted its redesignation request on November 13, 2014, requirements under subpart 4 were not due.

EPA’s view that, for purposes of evaluating the Tennessee portion of the Chattanooga TN-GA Area redesignation, the subpart 4 requirements were not due at the time the State submitted the redesignation request is in keeping with the EPA’s interpretation of subpart 2 requirements for subpart 1 ozone areas redesignated subsequent to the D.C. Circuit’s decision in *South Coast Air Quality Mgmt. Dist. v. EPA*, 472 F.3d 882 (D.C. Cir. 2006). In *South Coast*, the Court found that EPA was not permitted to implement the 1997 8-hour ozone standard solely under subpart 1 and held that EPA was required under the statute to implement the standard under the ozone-specific requirements of subpart 2 as well. Subsequent to the *South Coast* decision, in evaluating and acting upon redesignation requests for the 1997 8-hour ozone standard that were submitted to EPA for areas under subpart 1, EPA applied its longstanding interpretation of the CAA that “applicable requirements,” for purposes of evaluating a redesignation, are those that had been due at the time the redesignation request was submitted.

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<sup>8</sup> Applicable requirements of the CAA that come due subsequent to the area’s submittal of a complete redesignation request remain applicable until a redesignation is approved, but are not required as a prerequisite to redesignation. Section 175A(c) of the CAA.



*See, e.g.,* Proposed Redesignation of Manitowoc County and Door County Nonattainment Areas (75 FR 22047, 22050, April 27, 2010). In those actions, EPA therefore did not consider subpart 2 requirements to be “applicable” for the purposes of evaluating whether the area should be redesignated under section 107(d)(3)(E).

EPA’s interpretation derives from the provisions of CAA Section 107(d)(3)(E). Section 107(d)(3)(E)(v) states that, for an area to be redesignated, a state must meet “all requirements ‘applicable’ to the area under section 110 and part D.” Section 107(d)(3)(E)(ii) provides that the EPA must have fully approved the “applicable” SIP for the area seeking redesignation. These two sections read together support EPA’s interpretation of “applicable” as only those requirements that came due prior to submission of a complete redesignation request. First, holding states to an ongoing obligation to adopt new CAA requirements that arose after the state submitted its redesignation request, in order to be redesignated, would make it problematic or impossible for EPA to act on redesignation requests in accordance with the 18-month deadline Congress set for EPA action in section 107(d)(3)(D). If “applicable requirements” were interpreted to be a continuing flow of requirements with no reasonable limitation, states, after submitting a redesignation request, would be forced continuously to make additional SIP submissions that in turn would require EPA to undertake further notice-and-comment rulemaking actions to act on those submissions. This would create a regime of unceasing rulemaking that would delay action on the redesignation request beyond the 18-month timeframe provided by the Act for this purpose.

Second, a fundamental premise for redesignating a nonattainment area to attainment is that the area has attained the relevant NAAQS due to emission reductions from existing controls. Thus, an area for which a redesignation request has been submitted would have already attained

the NAAQS as a result of satisfying statutory requirements that came due prior to the submission of the request. Absent a showing that unadopted and unimplemented requirements are necessary for future maintenance, it is reasonable to view the requirements applicable for purposes of evaluating the redesignation request as including only those SIP requirements that have already come due. These are the requirements that led to attainment of the NAAQS. To require, for redesignation approval, that a state also satisfy additional SIP requirements coming due after the state submits its complete redesignation request, and while EPA is reviewing it, would compel the state to do more than is necessary to attain the NAAQS, without a showing that the additional requirements are necessary for maintenance.

*d. Subpart 4 Requirements and the Tennessee portion of the Chattanooga TN-GA-AL Area Redesignation Request*

Even if EPA were to take the view that the Court's January 4, 2013, decision requires that, in the context of pending redesignations, subpart 4 requirements were due and in effect at the time the State submitted its redesignation request, EPA proposes to determine that the Tennessee portion of the Chattanooga TN-GA-AL Area still qualifies for redesignation to attainment. As explained below, EPA believes that the redesignation request for the Tennessee portion of the Chattanooga TN-GA Area, though not expressed in terms of subpart 4 requirements, substantively meets the requirements of that subpart for purposes of redesignating the Tennessee portion of the Chattanooga TN-GA Area to attainment.

With respect to evaluating the relevant substantive requirements of subpart 4 for purposes of redesignating the Tennessee portion of the Chattanooga TN-GA-AL Area, EPA notes that subpart 4 incorporates components of subpart 1 of part D, which contains general air quality

planning requirements for areas designated as nonattainment. *See* section 172(c). Subpart 4 itself contains specific planning and scheduling requirements for PM<sub>10</sub><sup>9</sup> nonattainment areas, and under the Court’s January 4, 2013, decision in *NRDC v. EPA*, these same statutory requirements also apply for PM<sub>2.5</sub> nonattainment areas. EPA has longstanding general guidance that interprets the 1990 amendments to the CAA, making recommendations to states for meeting the statutory requirements for SIPs for nonattainment areas.<sup>10</sup> In the General Preamble, EPA discussed the relationship of subpart 1 and subpart 4 SIP requirements and pointed out that subpart 1 requirements were to an extent “subsumed by, or integrally related to, the more specific PM-10 requirements.” *See* 57 FR 13538. The subpart 1 requirements include, among other things, provisions for attainment demonstrations, RACM, RFP, emissions inventories, and contingency measures.

For the purposes of this redesignation, in order to identify any additional requirements which would apply under subpart 4, EPA is considering the Tennessee portion of the Chattanooga TN-GA-AL Area to be a “moderate” PM<sub>2.5</sub> nonattainment area. Under section 188 of the CAA, all areas designated nonattainment areas under subpart 4 would initially be classified by operation of law as “moderate” nonattainment areas and would remain moderate nonattainment areas unless and until EPA reclassifies the area as a “serious” nonattainment area. Accordingly, EPA believes that it is appropriate to limit the evaluation of the potential impact of subpart 4 requirements to those that would be applicable to moderate nonattainment areas. Sections 189(a) and (c) of subpart 4 apply to moderate nonattainment areas and include the following: (1) an approved permit program for construction of new and modified major

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<sup>9</sup> PM<sub>10</sub> refers to particles nominally 10 micrometers in diameter or smaller.

<sup>10</sup> *See* “State Implementation Plans; General Preamble for the Implementation of Title I of the Clean Air Act Amendments of 1990,” 57 FR 13498 (April 16, 1992) (the “General Preamble”).

stationary sources (section 189(a)(1)(A)); (2) an attainment demonstration (section 189(a)(1)(B)); (3) provisions for RACM (section 189(a)(1)(C)); and (4) quantitative milestones demonstrating RFP toward attainment by the applicable attainment date (section 189(c)).

The permit requirements of subpart 4, as contained in section 189(a)(1)(A), refer to and apply the subpart 1 permit provisions requirements of sections 172 and 173 to  $PM_{10}$ , without adding to them. Consequently, EPA believes that section 189(a)(1)(A) does not itself impose for redesignation purposes any additional requirements for moderate areas beyond those contained in subpart 1.<sup>11</sup> In any event, in the context of redesignation, EPA has long relied on the interpretation that a fully approved nonattainment new source review program is not considered an applicable requirement for redesignation, provided the area can maintain the standard with a PSD program after redesignation. A detailed rationale for this view is described in a memorandum from Mary Nichols, Assistant Administrator for Air and Radiation, dated October 14, 1994, entitled “Part D New Source Review Requirements for Areas Requesting Redesignation to Attainment.” *See also* rulemakings for Detroit, Michigan (60 FR 12467-12468, March 7, 1995); Cleveland-Akron-Lorain, Ohio (61 FR 20458, 20469-20470, May 7, 1996); Louisville, Kentucky (66 FR 53665, October 23, 2001); and Grand Rapids, Michigan (61 FR 31834-31837, June 21, 1996).

With respect to the specific attainment planning requirements under subpart 4,<sup>12</sup> when EPA evaluates a redesignation request under either subpart 1 or 4, any area that is attaining the  $PM_{2.5}$  standard is viewed as having satisfied the attainment planning requirements for these subparts. As discussed above, for redesignations, EPA has for many years interpreted attainment-linked requirements as not applicable for areas attaining the standard.

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<sup>11</sup> The potential effect of section 189(e) on section 189(a)(1)(A) for purposes of evaluating this redesignation is discussed below.

<sup>12</sup> i.e., attainment demonstration, RFP milestone requirements, and RACM.

Therefore, even if we were to consider the Court's January 4, 2013, decision in *NRDC v. EPA* to mean that attainment-related requirements specific to subpart 4 should be imposed retroactively<sup>13</sup> and thus are now past due, those requirements do not apply to an area that is attaining the 1997 PM<sub>2.5</sub> standard for the purpose of evaluating a pending request to redesignate the area to attainment.

Elsewhere in this document, EPA proposes to determine that the Area has attained the 1997 PM<sub>2.5</sub> standard. Under its longstanding interpretation, EPA is proposing to determine here that the Area meets the attainment-related plan requirements of subparts 1 and 4.

Thus, EPA is proposing to conclude that the requirements to submit an attainment demonstration under 189(a)(1)(B), a RACM determination under section 189(a)(1)(C), and a RFP demonstration under 189(c)(1) are satisfied for purposes of evaluating the redesignation request.

*e. Subpart 4 and Control of PM<sub>2.5</sub> Precursors*

The D.C. Circuit in *NRDC v. EPA* remanded to EPA the two rules at issue in the case with instructions to EPA to re-promulgate them consistent with the requirements of subpart 4. EPA in this section addresses the Court's opinion with respect to PM<sub>2.5</sub> precursors. While past implementation of subpart 4 for PM<sub>10</sub> has allowed for control of PM<sub>10</sub> precursors such as NO<sub>x</sub> from major stationary, mobile, and area sources in order to attain the standard as expeditiously as practicable, CAA section 189(e) specifically provides that control requirements for major stationary sources of direct PM<sub>10</sub> shall also apply to PM<sub>10</sub> precursors from those sources, except

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<sup>13</sup> As explained above, EPA does not believe that the Court's January 4, 2013, decision should be interpreted so as to impose these requirements on the states retroactively. *Sierra Club v. Whitman*, *supra*.

where EPA determines that major stationary sources of such precursors “do not contribute significantly to PM<sub>10</sub> levels which exceed the standard in the area.”

EPA’s 1997 PM<sub>2.5</sub> implementation rule, remanded by the D.C. Circuit, contained rebuttable presumptions concerning certain PM<sub>2.5</sub> precursors applicable to attainment plans and control measures related to those plans. Specifically, in 40 CFR 51.1002, EPA provided, among other things, that a state was “not required to address VOC [and ammonia] as . . . PM<sub>2.5</sub> attainment plan precursor[s] and to evaluate sources of VOC [and ammonia] emissions in the State for control measures.” EPA intended these to be rebuttable presumptions. EPA established these presumptions at the time because of uncertainties regarding the emission inventories for these pollutants and the effectiveness of specific control measures in various regions of the country in reducing PM<sub>2.5</sub> concentrations. EPA also left open the possibility for such regulation of VOC and ammonia in specific areas where that was necessary.

The Court in its January 4, 2013, decision made reference to both section 189(e) and 40 CFR 51.1002, and stated that, “In light of our disposition, we need not address the petitioners’ challenge to the presumptions in [40 CFR 51.1002] that volatile organic compounds and ammonia are not PM<sub>2.5</sub> precursors, as subpart 4 expressly governs precursor presumptions.” *NRDC v. EPA*, at 27, n.10.

Elsewhere in the Court’s opinion, however, the Court observed:

Ammonia is a precursor to fine particulate matter, making it a precursor to both PM<sub>2.5</sub> and PM<sub>10</sub>. For a PM<sub>10</sub> nonattainment area governed by subpart 4, a precursor is presumptively regulated. *See* 42 U.S.C. § 7513a(e) [section 189(e)]. *Id.* at 21, n.7.

For a number of reasons, EPA believes that its proposed redesignation of the Tennessee portion of the Chattanooga TN-GA-AL Area is consistent with the Court's decision on this aspect of subpart 4. First, while the Court, citing section 189(e), stated that "for a PM<sub>10</sub> area governed by subpart 4, a precursor is 'presumptively regulated,'" the Court expressly declined to decide the specific challenge to EPA's 1997 PM<sub>2.5</sub> implementation rule provisions regarding ammonia and VOC as precursors. The Court had no occasion to determine whether and how it was substantively necessary to regulate any specific precursor in a particular PM<sub>2.5</sub> nonattainment area, and did not address what might be necessary for purposes of acting upon a redesignation request.

However, even if EPA takes the view that the requirements of subpart 4 were deemed applicable at the time that the state submitted the redesignation request, and disregards the implementation rule's rebuttable presumptions regarding ammonia and VOC as PM<sub>2.5</sub> precursors, the regulatory consequence would be to consider the need for regulation of all precursors from any sources in the area to demonstrate attainment and to apply the section 189(e) provisions to major stationary sources of precursors. In the case of the Chattanooga TN-GA-AL Area, EPA believes that doing so is consistent with proposing redesignation of the area for the PM<sub>2.5</sub> standard. The Chattanooga TN-GA-AL Area has attained the standard without any specific additional controls of VOC and ammonia emissions from any sources in the Area.

Precursors in subpart 4 are specifically regulated under the provisions of section 189(e), which requires, with important exceptions, control requirements for major stationary sources of PM<sub>10</sub> precursors.<sup>14</sup> Under subpart 1 and EPA's prior implementation rule, all major stationary sources of PM<sub>2.5</sub> precursors were subject to regulation, with the exception of ammonia and VOC.

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<sup>14</sup> Under either subpart 1 or subpart 4, for purposes of demonstrating attainment as expeditiously as practicable, a state is required to evaluate all economically and technologically feasible control measures for direct PM emissions and precursor emissions, and adopt those measures that are deemed reasonably available.

Thus, EPA must address here whether additional controls of ammonia and VOC from major stationary sources are required under section 189(e) of subpart 4 in order to redesignate the area for the 1997 PM<sub>2.5</sub> standard. As explained below, EPA does not believe that any additional controls of ammonia and VOC are required in the context of this redesignation.

In the General Preamble, EPA discusses its approach to implementing section 189(e). *See* 57 FR 13538 (April 16, 1992). With regard to precursor regulation under section 189(e), the General Preamble explicitly stated that control of VOCs under other Act requirements may suffice to relieve a state from the need to adopt precursor controls under section 189(e). *See* 57 FR 13542. EPA in this rulemaking proposes to determine that even if not explicitly addressed by the State in its submission, the State does not need to take further action with respect to ammonia and VOCs as precursors to satisfy the requirements of section 189(e). This proposed determination is based on our findings that: (1) the Tennessee portion of the Chattanooga TN-GA-AL Area contains no major stationary sources of ammonia, and (2) existing major stationary sources of VOC are adequately controlled under other provisions of the CAA regulating the ozone NAAQS.<sup>15</sup> In the alternative, EPA proposes to determine that, under the express exception provisions of section 189(e), and in the context of the redesignation of the Area, which is attaining the 1997 Annual PM<sub>2.5</sub> standard, at present ammonia and VOC precursors from major stationary sources do not contribute significantly to levels exceeding the 1997 PM<sub>2.5</sub> standard in the Chattanooga TN-GA-AL Area. *See* 57 FR 13539.

EPA notes that its 1997 PM<sub>2.5</sub> implementation rule provisions in 40 CFR 51.1002 were not directed at evaluation of PM<sub>2.5</sub> precursors in the context of redesignation, but rather the rule assesses SIP plans and control measures required to bring a nonattainment area into attainment of

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<sup>15</sup> The Chattanooga TN-GA-AL Area has reduced VOC emissions through the implementation of various control programs including various on-road and non-road motor vehicle control programs.



the 1997 PM<sub>2.5</sub> NAAQS. By contrast, redesignation to attainment primarily requires the area to have already attained due to permanent and enforceable emission reductions, and to demonstrate that controls in place can continue to maintain the standard. Thus, even if EPA regards the Court's January 4, 2013, decision as calling for "presumptive regulation" of ammonia and VOC for PM<sub>2.5</sub> under the attainment planning provisions of subpart 4, those provisions in and of themselves do not require additional controls of these precursors for an area that already qualifies for redesignation. Nor does EPA believe that requiring the State to address precursors differently than they have already would result in a substantively different outcome.

Although, as EPA has emphasized, its consideration here of precursor requirements under subpart 4 is in the context of a redesignation to attainment, EPA's existing interpretation of subpart 4 requirements with respect to precursors in attainment plans for PM<sub>10</sub> contemplates that states may develop attainment plans that regulate only those precursors that are necessary for purposes of attainment in the area in question, i.e., states may determine that only certain precursors need be regulated for attainment and control purposes.<sup>16</sup> Courts have upheld this approach to the requirements of subpart 4 for PM<sub>10</sub>.<sup>17</sup> EPA believes that application of this approach to PM<sub>2.5</sub> precursors under subpart 4 is reasonable. Because the Chattanooga TN-GA-AL Area has already attained the 1997 PM<sub>2.5</sub> NAAQS with its current approach to regulation of PM<sub>2.5</sub> precursors, EPA believes that it is reasonable to conclude in the context of this redesignation that there is no need to revisit the attainment control strategy with respect to the treatment of precursors. Even if the Court's decision is construed to impose an obligation, in

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<sup>16</sup> See "Approval and Promulgation of Implementation Plans for California – San Joaquin Valley PM-10 Nonattainment Area; Serious Area Plan for Nonattainment of the 24-Hour and Annual PM-10 Standards," 69 FR 30006 (May 26, 2004) (approving a PM10 attainment plan that impose controls on direct PM10 and NO<sub>x</sub> emissions and did not impose controls on SO<sub>2</sub>, VOC, or ammonia emissions).

<sup>17</sup> See *Association of Irrigated Residents v. EPA et al.*, 423 F.3d 989 (9<sup>th</sup> Cir. 2005).

evaluating this redesignation request, to consider additional precursors under subpart 4, it would not affect EPA's approval here of Tennessee's request for redesignation of the Tennessee portion of the Chattanooga TN-GA-AL Area. In the context of a redesignation, Tennessee has shown that the Chattanooga TN-GA-AL Area has attained the standard. Moreover, the State has shown, and EPA has proposed to determine, that attainment in this Area is due to permanent and enforceable emissions reductions on all precursors necessary to provide for continued attainment. It follows logically that no further control of additional precursors is necessary. Accordingly, EPA does not view the January 4, 2013, decision of the court as precluding redesignation of the Tennessee portion of the Chattanooga TN-GA-AL Area to attainment for the 1997 Annual PM<sub>2.5</sub> NAAQS at this time. In sum, even if Tennessee were required to address precursors for the Tennessee portion of the Chattanooga TN-GA-AL Area under subpart 4 rather than under subpart 1, EPA would still conclude that the Area had met all applicable requirements for purposes of redesignation in accordance with section 107(d)(3)(E)(ii) and (v).

*f. Maintenance Plan and Evaluation of Precursors*

With regard to the redesignation of the Tennessee portion of the Chattanooga TN-GA-AL Area, in evaluating the effect of the Court's remand of EPA's implementation rule, which included presumptions against consideration of VOC and ammonia as PM<sub>2.5</sub> precursors, EPA in this proposal is also considering the impact of the decision on the maintenance plan required under sections 175A and 107(d)(3)(E)(iv). To begin with, EPA notes that the Area has attained the 1997 Annual PM<sub>2.5</sub> NAAQS and that the State has shown that attainment of that standard is due to permanent and enforceable emission reductions.

EPA proposes to determine that the State's maintenance plan shows continued maintenance of the standard by tracking the levels of the precursors whose control brought about attainment of the 1997 PM<sub>2.5</sub> standard in the Chattanooga TN-GA-AL Area. EPA therefore believes that the only additional consideration related to the maintenance plan requirements that results from the Court's January 4, 2013, decision is that of assessing the potential role of VOC and ammonia in demonstrating continued maintenance in this area. As explained below, based upon documentation provided by Tennessee and supporting information, EPA believes that the maintenance plan for the Tennessee portion of the Chattanooga TN-GA-AL Area need not include any additional emission reductions of VOC or ammonia in order to provide for continued maintenance of the standard.

First, as noted above in EPA's discussion of section 189(e), VOC emission levels in this area have historically been well-controlled under SIP requirements related to ozone and other pollutants. Second, total ammonia emissions throughout the Tennessee portion of the Chattanooga TN-GA-AL area are low, estimated to be approximately 370.9 tpy for 2007. *See* Table 7 below. As described below, available information shows that no precursor, including VOC and ammonia, is expected to increase significantly over the maintenance period so as to interfere with or undermine the State's maintenance demonstration.

**Table 7: Comparison of 2007 and 2020 VOC and Ammonia Emission Totals by Source Sector (tpy) for the Tennessee Portion of the Area<sup>18</sup>**

Source Sector	VOC			Ammonia		
	2007	2020	Net Change	2007	2020	Net Change
<b>Nonpoint</b>	5,338.9	5,372.1	33.3	194.2	202.0	7.8
<b>Nonroad</b>	2,383.3	1,213.3	-1170	2.7	3.1	0.4
<b>Onroad</b>	4,797.5	1,541.8	-3255.7	161.6	92.5	-69.1
<b>Point</b>	1,047.0	1,038.1	-8.9	12.5	12.5	0
<b>Total</b>	13,566.6	9,165.4	-4,401.2	370.9	310.1	-60.8

Tennessee's maintenance plan shows that emissions of SO<sub>2</sub>, NO<sub>x</sub>, and PM<sub>2.5</sub> are projected to decrease over the maintenance period in the Tennessee portion of the Chattanooga TN-GA-AL Area by 91.9 tpy, 7,890.4 tpy and 116.5 tpy, respectively. *See* Table 6 above. In addition, emissions inventories used in the regulatory impact analysis (RIA) for the 2012 PM<sub>2.5</sub> NAAQS show that VOC emissions are projected to decrease by 4,401.2 tpy and that ammonia emissions are projected to decrease by 60.8 tpy between 2007 and 2020. While the RIA emissions inventories are only projected out to 2020, there is no reason to believe that this overall downward trend would not continue through 2025. Given that the Chattanooga TN-GA-AL Area is already attaining the 1997 Annual PM<sub>2.5</sub> NAAQS even with the current level of emissions from sources in the Area, the overall downward trend of emissions inventories is consistent with continued attainment. Even if VOC and ammonia emissions were to increase unexpectedly between 2020 and 2025, the overall emission reductions projected in SO<sub>2</sub> and NO<sub>x</sub> would be sufficient to offset any increases. For these reasons, EPA believes that local emissions

<sup>18</sup> These emissions estimates were taken from the emissions inventories developed for the regulatory impact analysis for the 2012 PM<sub>2.5</sub> NAAQS.

of all the potential PM<sub>2.5</sub> precursors will not increase to the extent that they might cause monitored PM<sub>2.5</sub> levels to violate the 1997 Annual PM<sub>2.5</sub> standard during the maintenance period.

In addition, available air quality data and modeling analyses show continued maintenance of the standard during the maintenance period. As noted in section V, above, the Chattanooga TN-GA-AL Area recorded a PM<sub>2.5</sub> design value of 10.5 µg/m<sup>3</sup> during 2011-2013, the most recent three years available with complete, quality-assured and certified ambient air monitoring data. This is well below the 1997 Annual PM<sub>2.5</sub> NAAQS of 15 µg/m<sup>3</sup>. Moreover, the modeling analysis conducted for the RIA for the 2012 PM<sub>2.5</sub> NAAQS indicates that the design value for this area is expected to continue to decline through 2020. Given the decrease in overall precursor emissions projected through 2025, it is reasonable to conclude that monitored PM<sub>2.5</sub> levels in this area will also continue to decrease through 2025.

Thus, EPA believes that there is ample justification to conclude that the Tennessee portion of the Chattanooga TN-GA-AL Area should be redesignated, even taking into consideration the emissions of VOC and ammonia potentially relevant to PM<sub>2.5</sub>. After consideration of the D.C. Circuit's January 4, 2013, decision, and for the reasons set forth in this document, EPA continues to propose approval of the State's maintenance plan and its request to redesignate the Tennessee portion of the Chattanooga TN-GA-AL Area to attainment for the 1997 Annual PM<sub>2.5</sub> NAAQS.

## **VII. What is EPA's Analysis of Tennessee's Proposed NO<sub>x</sub> and PM<sub>2.5</sub> MVEBs for the Tennessee portion of the Chattanooga TN-GA-AL Area?**

Under section 176(c) of the CAA, new transportation plans, programs, and projects, such as the construction of new highways, must "conform" to (i.e., be consistent with) the part of the

state's air quality plan that addresses pollution from cars and trucks. Conformity to the SIP means that transportation activities will not cause new air quality violations, worsen existing violations, or delay timely attainment of the NAAQS or any interim milestones. If a transportation plan does not conform, most new projects that would expand the capacity of roadways cannot go forward. Regulations at 40 CFR part 93 set forth EPA policy, criteria, and procedures for demonstrating and assuring conformity of such transportation activities to a SIP. The regional emissions analysis is one, but not the only, requirement for implementing transportation conformity. Transportation conformity is a requirement for nonattainment and maintenance areas. Maintenance areas are areas that were previously nonattainment for a particular NAAQS but have since been redesignated to attainment with an approved maintenance plan for that NAAQS.

Under the CAA, states are required to submit, at various times, control strategy SIPs and maintenance plans for nonattainment areas. These control strategy SIPs (including RFP and attainment demonstration) and maintenance plans create MVEBs for criteria pollutants and/or their precursors to address pollution from cars and trucks. Per 40 CFR part 93, a MVEB must be established for the last year of the maintenance plan. A state may adopt MVEBs for other years as well. The MVEBs is the portion of the total allowable emissions in the maintenance demonstration that is allocated to highway and transit vehicle use and emissions. *See* 40 CFR 93.101. The MVEBs serves as a ceiling on emissions from an area's planned transportation system. The MVEBs concept is further explained in the preamble to the November 24, 1993, Transportation Conformity Rule. *See* 58 FR 62188. The preamble also describes how to establish the MVEBs in the SIP and how to revise the MVEBs.

After interagency consultation with the transportation partners for the Tennessee portion of the Chattanooga TN-GA-AL Area, Tennessee has elected to develop MVEBs for NO<sub>x</sub> and PM<sub>2.5</sub> for the entire nonattainment area. Tennessee has developed these MVEBs, as required, for the last year of its maintenance plan, 2025. The MVEBs reflect the total on-road emissions for 2025, plus an allocation from the available NO<sub>x</sub> and PM<sub>2.5</sub> safety margin. Under 40 CFR 93.101, the term “safety margin” is the difference between the attainment level (from all sources) and the projected level of emissions (from all sources) in the maintenance plan. The safety margin can be allocated to the transportation sector; however, the total emissions must remain below the attainment level. The NO<sub>x</sub> and PM<sub>2.5</sub> MVEBs and allocation from the safety margin were developed in consultation with the transportation partners and were added to account for uncertainties in population growth, changes in model vehicle miles traveled and new emission factor models. The NO<sub>x</sub> and PM<sub>2.5</sub> MVEBs for the Tennessee portion of the Chattanooga TN-GA-AL Area are defined in Table 8 below.

**Table 8. Tennessee portion of the Chattanooga TN-GA-AL Area PM<sub>2.5</sub> and NO<sub>x</sub> MVEBs (tpy)**

	<b>PM<sub>2.5</sub></b>	<b>NO<sub>x</sub></b>
2025 Mobile Emissions	76.5	2,508.7
2025 Safety Margin Allocated	23.5	691.3
<b>2025 Total Mobile Budget</b>	<b>100.0</b>	<b>3,200.0</b>

In an effort to accommodate future variations in Travel Demand Models (TDM) and the vehicle miles traveled forecast when no change to the network is planned, TDEC consulted with

the interagency consultation group, including EPA, to determine a reasonable approach to address this variation. The projected 2025 on-road motor vehicle emissions for direct PM<sub>2.5</sub> and NOx are 76.5 tpy and 2,508.7 tpy, respectively. On-road emissions of SO<sub>2</sub> are considered de-minimus; therefore, no budget for SO<sub>2</sub> is required.<sup>19</sup>

A safety margin is necessary to accommodate the variabilities, or worst-case scenarios that can occur due to future planning assumptions. The worst-case daily motor vehicle emissions projection for PM<sub>2.5</sub> is 23.5 tpy above the projected 2025 on-road emissions. In a worst-case scenario, the needed annual safety margin for the PM<sub>2.5</sub> MVEB would be 23.5 tpy resulting in an overall MVEB of 100.0 tpy. The worst-case daily motor vehicle emissions projection for NOx is 691.3 tpy above the projected 2025 on-road emissions. In a worst-case scenario, the required annual safety margin for the NOx MVEB would be 691.3 tpy resulting in an overall MVEB of 3,200.0 tpy.

Through this rulemaking, EPA is proposing to approve the MVEBs for NOx and PM<sub>2.5</sub> for 2025 for the Tennessee portion of the Chattanooga TN-GA-AL Area because EPA has determined that the Area maintains the 1997 Annual PM<sub>2.5</sub> NAAQS with the emissions at the levels of the budgets. Once the MVEBs for the Tennessee portion of the Chattanooga TN-GA-AL Area are approved or found adequate (whichever is completed first), they must be used for future conformity determinations. After thorough review, EPA has determined that the budgets meet the adequacy criteria, as outlined in 40 CFR 93.118(e)(4). Therefore, EPA is proposing to approve the budgets because they are consistent with maintenance of the 1997 Annual PM<sub>2.5</sub> NAAQS through 2025.

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<sup>19</sup> 70 FR 24280, 24283 (May 6, 2005) (“While speciated air quality data show that sulfate is a relatively significant component (e.g., ranging from nine to 40 percent) of PM<sub>2.5</sub> mass in all regions of the country, emissions inventory data and projections show that on-road emissions of SOx constitute a “*de minimis*” (i.e., extremely small) portion of total SOx emissions.”).



**VIII. What is the Status of EPA’s Adequacy Determination for the Proposed NO<sub>x</sub> and PM<sub>2.5</sub> MVEBs for 2025 for the Tennessee portion of the Chattanooga TN-GA-AL Area?**

When reviewing submitted “control strategy” SIPs or maintenance plans containing MVEB, EPA may affirmatively find the MVEB contained therein adequate for use in determining transportation conformity. Once EPA affirmatively finds the submitted MVEB is adequate for transportation conformity purposes, that MVEBs must be used by state and federal agencies in determining whether proposed transportation projects conform to the SIP as required by section 176(c) of the CAA.

EPA’s substantive criteria for determining adequacy of MVEBs are set out in 40 CFR 93.118(e)(4). The process for determining adequacy consists of three basic steps: public notification of a SIP submission, a public comment period, and EPA’s adequacy determination. This process for determining the adequacy of submitted MVEBs for transportation conformity purposes was initially outlined in EPA’s May 14, 1999, guidance entitled “Conformity Guidance on Implementation of March 2, 1999, Conformity Court Decision.” EPA adopted regulations to codify the adequacy process in rulemaking entitled Transportation Conformity Rule Amendments for the “New 8-Hour Ozone and PM<sub>2.5</sub> National Ambient Air Quality Standards and Miscellaneous Revisions for Existing Areas; Transportation Conformity Rule Amendments: Response to Court Decision and Additional Rule Change”; July 1, 2004 (69 FR 40004). Additional information on the adequacy process for transportation conformity purposes is available in the proposed rule entitled “Transportation Conformity Rule Amendments: Response to Court Decision and Additional Rule Changes”; June 30, 2003 (68 FR 38974, 38984).

As discussed earlier, Tennessee's maintenance plan submission includes NO<sub>x</sub> and PM<sub>2.5</sub> MVEBs for the Tennessee portion of the Chattanooga TN-GA-AL Area for 2025, the last year of the maintenance plan. EPA reviewed the NO<sub>x</sub> and PM<sub>2.5</sub> MVEBs through the adequacy process, and the adequacy of the MVEBs was open for public comment on EPA's adequacy web site on December 9, 2014, found at: <http://www.epa.gov/otaq/stateresources/transconf/currships.htm>. The EPA public comment period on adequacy for the MVEBs for 2025 for the Tennessee portion of the Chattanooga TN-GA-AL Area closed on January 8, 2015. EPA did not receive any comments on the adequacy of the MVEBs, nor did EPA receive any requests for the SIP submittal.

EPA intends to make its determination on the adequacy of the 2025 MVEBs for the Tennessee portion of the Chattanooga TN-GA-AL Area for transportation conformity purposes in the near future by completing the adequacy process that was started on December 9, 2014. After EPA finds the 2025 MVEBs adequate under 40 CFR 93.118(f)(1)(iv) or take final action to approve them into the Tennessee SIP under 40 CFR 93.118(f)(2)(iii), the new MVEBs for NO<sub>x</sub> and PM<sub>2.5</sub> must be used for future transportation conformity determinations. For required regional emissions analysis years that involve 2025 or beyond, the applicable budgets will be the new 2025 MVEBs established in the maintenance plan.

**IX. Proposed Actions on the Redesignation Request and Maintenance Plan SIP Revisions Including Approval of the NO<sub>x</sub> and PM<sub>2.5</sub> MVEBs for 2025 for the Tennessee portion of the Chattanooga TN-GA-AL Area**

On May 31, 2011, EPA determined that the Chattanooga TN-GA Area was attaining the 1997 PM<sub>2.5</sub> NAAQS. *See* 76 FR 55774. EPA is now taking two separate but related actions regarding the Area's redesignation and maintenance of the 1997 Annual PM<sub>2.5</sub> NAAQS.

First, EPA is proposing to determine that, based upon review of complete, quality-assured and certified ambient monitoring data for the 2007-2009 period, and review of data in AQS for 2010 through 2013, that the Chattanooga TN-GA-AL Area continues to attain the 1997 Annual PM<sub>2.5</sub> NAAQS. EPA is also proposing to determine that the Tennessee portion of the Chattanooga TN-GA-AL Area has met the criteria under CAA section 107(d)(3)(E) for redesignation from nonattainment to attainment for the 1997 Annual PM<sub>2.5</sub> NAAQS. On this basis, EPA is proposing to approve Tennessee's redesignation request for the Tennessee portion of the Chattanooga TN-GA-AL Area.

Second, EPA is proposing to approve the maintenance plan for the Tennessee portion of the Chattanooga TN-GA-AL Area, including the PM<sub>2.5</sub> and NO<sub>x</sub> MVEBs for 2025 submitted by Tennessee into the State's SIP (under section 175A). The maintenance plan demonstrates that the Area will continue to maintain the 1997 Annual PM<sub>2.5</sub> NAAQS, and the budgets meet all of the adequacy criteria contained in 40 CFR 93.118(e)(4) and (5). Further, as part of today's action, EPA is describing the status of its adequacy determination for transportation conformity purposes for the PM<sub>2.5</sub> and NO<sub>x</sub> MVEBs for 2025 under 40 CFR 93.118(f)(1). Within 24 months from the effective date of EPA's adequacy determination for the MVEBs or the effective date for the final rule approving the MVEBs into the Tennessee SIP, whichever is earlier, the

transportation partners will need to demonstrate conformity to the new NO<sub>x</sub> and PM<sub>2.5</sub> MVEBs pursuant to 40 CFR 93.104(e).

If finalized, approval of the redesignation request would change the official designation of Tennessee portion of the Chattanooga TN-GA-AL Area for the 1997 Annual PM<sub>2.5</sub> NAAQS, found at 40 CFR part 81 from nonattainment to attainment.

## **X. What is the Effect of EPA's Proposed Actions?**

EPA's proposed actions establish the basis upon which EPA may take final action on the issues being proposed for approval today. Approval of Tennessee's redesignation request would change the legal designation of Hamilton County in Tennessee for the 1997 Annual PM<sub>2.5</sub> NAAQS, found at 40 CFR part 81, from nonattainment to attainment. Approval of TDEC's request would also incorporate a plan for maintaining the 1997 Annual PM<sub>2.5</sub> NAAQS in the Chattanooga TN-GA-AL Area through 2025 into the Tennessee SIP. The maintenance plan includes contingency measures to remedy any future violations of the 1997 Annual PM<sub>2.5</sub> NAAQS and procedures for evaluation of potential violations. The maintenance plan also includes NO<sub>x</sub> and PM<sub>2.5</sub> MVEBs for the Tennessee portion of the Chattanooga TN-GA-AL Area. Additionally, EPA is notifying the public of the status of its adequacy determination for the NO<sub>x</sub> and PM<sub>2.5</sub> MVEBs for 2025 under 40 CFR 93.118(f)(1).

## **XI. Statutory and Executive Order Reviews**

Under the CAA, redesignation of an area to attainment and the accompanying approval of a maintenance plan under section 107(d)(3)(E) are actions that affect the status of a geographical area and do not impose any additional regulatory requirements on sources beyond those imposed

by state law. A redesignation to attainment does not in and of itself create any new requirements, but rather results in the applicability of requirements contained in the CAA for areas that have been redesignated to attainment. Moreover, the Administrator is required to approve a SIP submission that complies with the provisions of the Act and applicable Federal regulations. 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the criteria of the CAA. Accordingly, these proposed actions merely approve state law as meeting federal requirements and do not impose additional requirements beyond those imposed by state law. For that reason, these proposed actions:

- Is not a significant regulatory action subject to review by the Office of Management and Budget under Executive Orders 12866 (58 FR 51735, October 4, 1993) and 13563 (76 FR 3821, January 21, 2011);
- Do not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*);
- Are certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*);
- Do not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104-4);
- Do not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- Are not economically significant regulatory actions based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);

- Are not significant regulatory actions subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- Are not subject to requirements of Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the CAA; and
- Do not provide EPA with the discretionary authority to address, as appropriate, disproportionate human health or environmental effects, using practicable and legally permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994).

In addition, the SIP is not approved to apply on any Indian reservation land or in any other area where EPA or an Indian tribe has demonstrated that a tribe has jurisdiction. In those areas of Indian country, the rule does not have tribal implications as specified by Executive Order 13175 (65 FR 67249, November 9, 2000), nor will it impose substantial direct costs on tribal governments or preempt tribal law.

## **List of Subjects**

### **40 CFR Part 52**

Environmental protection, Air pollution control, Incorporation by reference, Intergovernmental relations, Particulate matter, Reporting and recordkeeping requirements, Sulfur oxides, Volatile organic compounds.

### **40 CFR Part 81**

Environmental protection, Air pollution control.

Authority: 42 U.S.C. 7401 et seq.

Dated: March 11, 2015.

Heather McTeer Toney,

Regional Administrator,

Region 4.

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